

# A Guide to Federal Data Sources On Manufacturing

U.S. DEPARTMENT OF COMMERCE  
Domestic and International Business Administration

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September 1977

## FOREWORD

This publication was made possible through the important contributions of individuals both in the government and the private sector who have contributed their ideas to its development. Special thanks are due to those persons who have expressed concern and interest in the Guide through their suggestions and technical assistance. In several instances the nature of the Guide prompted the use of some explanatory passages from the individual government publications covered, intact. Acknowledgement is rendered here for the significant part these passages assume in the Guide. Because of the time span involved between the research, preparation, and final publication of this Guide, further revisions of certain classifications and statistical series may have taken place. Readers are encouraged to contact the source agency for latest information on revisions to their statistical series.

Users of the publication are urged to offer suggestions for consideration in planning future editions. Suggestions and comments should be sent to: Mary O'Hara, Office of Business Research and Analysis, Bureau of Domestic Commerce, Room 2800, U.S. Department of Commerce, Washington, D.C. 20230.

Charley M. Denton, Director  
Office of Business Research  
and Analysis

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## I. INTRODUCTION

### A. Purpose

The purpose of this guide is to provide to the user of federal statistics a framework in which to evaluate the numerous statistics on the manufacturing sector. It attempts:

1. to show the basic types of data available in each publication and
2. the timeliness and detail of the statistics,
3. to point up significant differences between statistics from different sources or surveys,
4. to provide selectively definitions for those chapters where the definitions contribute to understanding the significance of the data type included in a specific publication.

The guide does not attempt to provide an all-inclusive description of the data types or explanations of them. Nor does it pass judgments on the quality of the data contained in the publications discussed. These subjects are dealt with in introductions and appendices to the specific documents and in technical articles and symposiums.

### B. Content

Certain features are contained in each chapter, but the diverse nature of the statistics covered has required variations from chapter to chapter. Common to each chapter are a brief introduction; definitions, where they are considered helpful in distinguishing between the various data types shown; a list of each data source by title, when the series began, and where it is obtainable; a narrative section on principal data type and a tabular section that shows detail and reporting unit as well as the specific data type.

Specific sections that occur in some sections are:

1. "Principal data type at a glance"--summarizing all the data available in one or two pages.
2. Summaries of methodology: These are given in either narrative or tabular form and are provided where the survey base or index used might affect the application the user is considering for particular data.

A chapter table of contents is provided at the beginning of each section.

C. Shortcuts to Answers on Federal Statistics

Here are a few suggestions for obtaining the statistics you need with the least effort.

Throughout the country there are Census Depository libraries which maintain files of all Census publications. In addition to the Census Depository libraries, there are Government Depository Libraries which have some Census publications. These libraries are located at most large universities and public libraries.

Both the Commerce and Labor Departments maintain a system of field offices that have on hand reference materials published by their respective agencies. Many Census and Labor publications also can be ordered through these regional offices.

Following this introduction is a list of the publications offices located in Washington of the agencies that publish the majority of the documents discussed here. If the publication you want is unobtainable through your local field office or one of the 18 GPO bookstores in the U.S. (a list of which is provided at the end of the introduction), try to obtain it directly through the publications office of the agency involved. These approaches will probably provide more timely results than ordering it from the Superintendent of Documents, Government Printing Office. If you happen to be in Washington, D.C., the GPO maintains six outlets located in Federal office buildings, where many publications can be obtained "off-the-rack". The phone number of the central sales office is (202) 783-3238. The central sales office is located at 710 North Capitol Street, N.W. Washington, D.C.

The Office of Management and Budget prepares a monthly publication called The Statistical Reporter. This publication provides articles on current developments in all aspects of Federal statistics and statistical programs. A subscription to this publication can be made through the Government Printing Office.

Many of the data sources described in this publication can be obtained in an automated format. For detailed specifications and policies regarding the availability and sale of computer tapes and microfiche the publications office of the respective agency should be contacted.

Finally, if you have additional questions, the Government Printing Office publishes a Federal Statistical Directory. This is a telephone directory, by agency, office and name, of practically all data and information related positions. Although the phone numbers in the book often change between biennial publications, it provides a significant short cut from the government operator route, especially when you do not have the name, but only the office you wish to contact. The GPO stock number for the 1976 edition is 041-001-00125-5.

D. Useful Guides, Monthly Reviews, and Publications Lists

The major statistics producing agencies publish a variety of guides to their data which can be quite helpful in pinpointing the specific type of data a user may require for his particular application. Here are a few of the major ones:

1. Office of Management and Budget:

Statistical Services of the United States Government. This book provides a comprehensive overview of the statistical structure producing economic and social statistics. It describes the organizational structure of the statistical system in the U.S. Government; methods of collection, tabulation and presentation of data; and the principal statistical programs and publications of each agency. Copies are available only from the Government Printing Office.

2. Bureau of the Census (Department of Commerce):

a. Mini-Guide to the 1972 Economic Censuses. This guide summarizes each of the Censuses conducted, provides a description of the SIC system, and the geographic classifications used, and contains a section on obtaining

data, including purchase of computer tapes.

- b. Guide to Industrial Statistics. This publication is a "finder guide" to Census manufacturing statistics, giving volume, chapter, and table locations for each data type, and 'cut-out' examples of tables contained in the Census volumes.
- c. Guide to Foreign Trade Statistics. This guide provides a detailed information locator, a comprehensive list of definitions and 'cut-out' examples of tables from numerous Census foreign trade publications.
- d. Guide to Programs and Publications--Subjects and Areas. This guide gives a tabular listing of all Census publications including series number, geographic areas and principal subjects covered. It includes a list of methodological studies and contains a chapter covering all statistical compendia and guides published by the Census Bureau.
- e. Bureau of the Census Catalog of Publications 1790-1972. This catalog provides a complete description of all publications, including periods covered, number of pages, and notations of title changes that have occurred over time. The first portion of the book covers the decennial censuses of population; the latter portion deals with the remainder of the Census publications. This catalog has been followed with shorter, serial editions on an annual and semi-annual basis.

3. Bureau of Labor Statistics (Department of Labor):

- a. Publications of the Bureau of Labor Statistics. This pamphlet provides an annotated listing of publications by subject, plus listings of bulletins and reports, mailing lists for press releases and announcements, order forms for free and sale publications, publications of the labor regional offices, and general instructions on how to acquire BLS data.
- b. Major Programs 1975/Bureau of Labor Statistics (Report 441). This publication provides a listing of programs by subject and includes for each: data available by type, degree of

coverage, sources of data, reference period, publications providing data and potential uses for the data. Major programs included are: employment and unemployment, prices and cost of living, and productivity and technological developments. It also contains a detailed table summarizing state and area data available from BLS. Listings of publications and order forms are also included in this document. Annual.

- c. Handbook of Labor Statistics. The Handbook contains brief descriptions and methodologies of the major statistical series of BLS, as well as 175 statistical tables displaying these series for current periods as well as some historical time series. Annual.
- d. BLS Handbook of Methods. This reference book provides detailed methodologies for BLS statistical series, including copies of actual questionnaires used in surveys. Occasional.
- e. Monthly Labor Review. The Review contains articles relating to many labor issues including methodological discussions. It provides monthly features including research summaries; significant decisions in labor cases; major agreements expiring next month; and current labor statistics-- summarizing the labor, price and productivity data that appear in its other publications.

4. Federal Reserve Board:

- a. "Federal Reserve Board Publications" is a list of regular publications, staff studies and periodic releases of the FRB. Includes order form.
- b. Federal Reserve Bulletin contains articles, technical revisions, announcements and statements to Congress, and a review of industrial production developments. The section, Financial and Business Statistics includes major economic, business, and financial indicators. The bulletin also contains the schedule of periodic FRB releases, and a map of the U.S. by Federal Reserve district banks. Monthly.

5. Bureau of Domestic Commerce:

- a. Measuring Markets: "A Guide to the Use of Federal and State Statistical Data." This 1974 publication of BDC provides a summary of statistical sources useful for planning marketing activity.

Chapters include information on measurable marketing components, and the data sources for such information as population and income, sales, and employment. The publication has very useful information on the sources of statistics by state.

E. Publications Offices of Major Statistical Agencies

U.S. Department of Commerce

(For Census publications)

Publications Services  
Bureau of the Census  
Room 1061 - Building #4  
Washington, D.C. 20233

U.S. Department of Labor

Office of Publications  
U. S. Department of Labor  
Bureau of Labor Statistics  
Washington, D.C. 20212

Federal Reserve Board

Publications Services  
Division of Administrative Services  
Board of Governors of the Federal  
Reserve System  
Washington, D.C. 20551

(Note)

Selected publications of these agencies and many government research reports are available in microfiche from:

National Technical Information Service (NTIS)  
Springfield, Virginia 22151

Catalogs of their hard copy publications as well as a description of their microfiche services are available at the same address. NTIS is a part of the Department of Commerce, Office of Science and Technology.

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Canton, Ohio 44702  
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Federal Building - U.S. Courthouse  
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Detroit, Michigan 48226  
Telephone: Area code 313-226-7816

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Jacksonville, Florida 32202  
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Kansas City, Missouri 64106  
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Los Angeles, California 90012  
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517 E. Wisconsin Avenue  
Milwaukee, Wisconsin 53202  
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New York, New York 10007  
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Philadelphia, Pennsylvania 19106  
Telephone: Area code 215-597-0677

Pueblo Sales Outlet  
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Telephone: Area code 303-544-2301

San Francisco Bookstore  
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450 Golden Gate Avenue  
San Francisco, California 94102  
Telephone: Area code 415-556-6657

Seattle Bookstore  
Federal Office Building, Room 194  
915 Second Avenue  
Seattle, Washington 98174  
Telephone: Area code 206-442-4270

#### G. Census Bureau Regional Offices

For information about the content of census publications and how to order them contact any Bureau of the Census Regional Office (listed below) or Commerce District Office, or

write to Director, Bureau of the Census, Washington, D.C. 20233. These offices will answer questions or help solve problems in acquiring or utilizing Census Bureau data.

#### Census Bureau Regional Offices

Atlanta, GA	(404) 526-2271	1365 Peachtree St., NE, Room 619	30309
Boston, MA	(617) 223-2327	441 Stuart St., 10th Floor	02116
Charlotte, NC	(704) 372-7471	Addison Bldg., Room 510, 22 South Church St.	28202
Chicago, IL	(312) 353-6251	55 E. Jackson Blvd., Suite 1304	60604
Dallas, TX	(214) 749-2814	1100 Commerce St., Room 3054	75202
Denver, CO	(303) 234-3924	11011 West 6th Ave., Box 25207	80225
Detroit, MI	(313) 226-7742	Washington Blvd., Bldg. Room 2100	48226
Kansas City, KN	(816) 374-4601	One Gateway Center, 4th & State Sts.	66101
Los Angeles, CA	(213) 824-7291	11777 San Vicente Blvd., 8th Floor	90049
New York, NY	(212) 264-3860	Federal Office Bldg., Room 4102, 26 Federal Plaza	10007
Philadelphia, PA	(215) 597-4920	William J. Green, Jr. Federal Bldg., Room 9244, 600 Arch St.	19106
Seattle, WA	(206) 442-7800	Lake Union Bldg., 1700 Westlake Ave., North.	98109



## U.S. DEPARTMENT OF COMMERCE DISTRICT OFFICE DIRECTORY

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August 1977



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•Frankfort (Memphis, Tennessee District)—Capitol Plaza Office Tower, Room 2332, 40601, Area Code 502 Tel 875-4421

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•Portland (Boston, Massachusetts District)—Maine State Pier, 40 Commercial Street 04111, Area Code 207 Tel 775-3131, FTS 833-3407

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Baltimore—Carroll F. Hopkins, Director, 415 U.S. Customhouse, Gay and Lombard Streets 21202, Area Code 301 Tel 962-3560, FTS 922-3560

## MASSACHUSETTS

Boston—Francis J. O'Connor, Director 10th Floor, 441 Stuart Street 02116, Area Code 617 Tel 223-2312, FTS 223-2312

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Detroit—William L. Welch, Director, 445 Federal Building, 231 West Lafayette 48226, Area Code 313 Tel 226-3650, FTS 226-3650

•Grand Rapids—350 Ottawa Street N.W. 49503, Area Code 616 Tel 456-2411/33 FTS 372-2411

## MINNESOTA

Minneapolis—Glenn A. Matson, Director, 218 Federal Building, 110 South Fourth Street 55401, Area Code 612 Tel 725-2133, FTS 725-2133

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•Jackson (Birmingham, Alabama District)—P.O. Box 849, 1202 Walter Sillers Building 39205, Area Code 601 Tel 969-4388, FTS 490-4388

## MISSOURI

St. Louis—Donald R. Loso, Director, 120 South Central Avenue 63105, Area Code 314 Tel 425-3302-4, FTS 279-3302

•Kansas City—Room 1840, 601 East 12th Street 64106, Area Code 816 Tel 374-3142, FTS 758-3142

## MONTANA

Bulte (Cheyenne, Wyoming District)—210 Miners Bank Building, Park Street 59701, Area Code 406 Tel 723-6561, Ext. 2317, FTS 585-2017

## NEBRASKA

Omaha—George H. Payne, Director, Capitol Plaza, Suite 703A, 1815 Capitol Avenue 68102, Area Code 402 Tel 221-3665, FTS 864-3665

## NEVADA

Reno—Joseph J. Jeremy, Director, 2028 Federal Building, 200 Booth Street 89509 Area Code 702 Tel 784-5203, FTS 470-5203

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Pittsburgh—Newton Heston, Jr., Director, 2002 Federal Building, 1000 Liberty Avenue 15222, Area Code 412 Tel 644-2850, FTS 722-2850

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San Juan (Hato Rey)—Enrique Vilella, Director, Room 659-Federal Building 00918, Area Code 809 Tel 753-4555, Ext. 555, FTS 753-4555

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•San Antonio—University of Texas at San Antonio, Div. of Continuing Education 78285, Area Code 512 Tel 229-5875, FTS 229-5875

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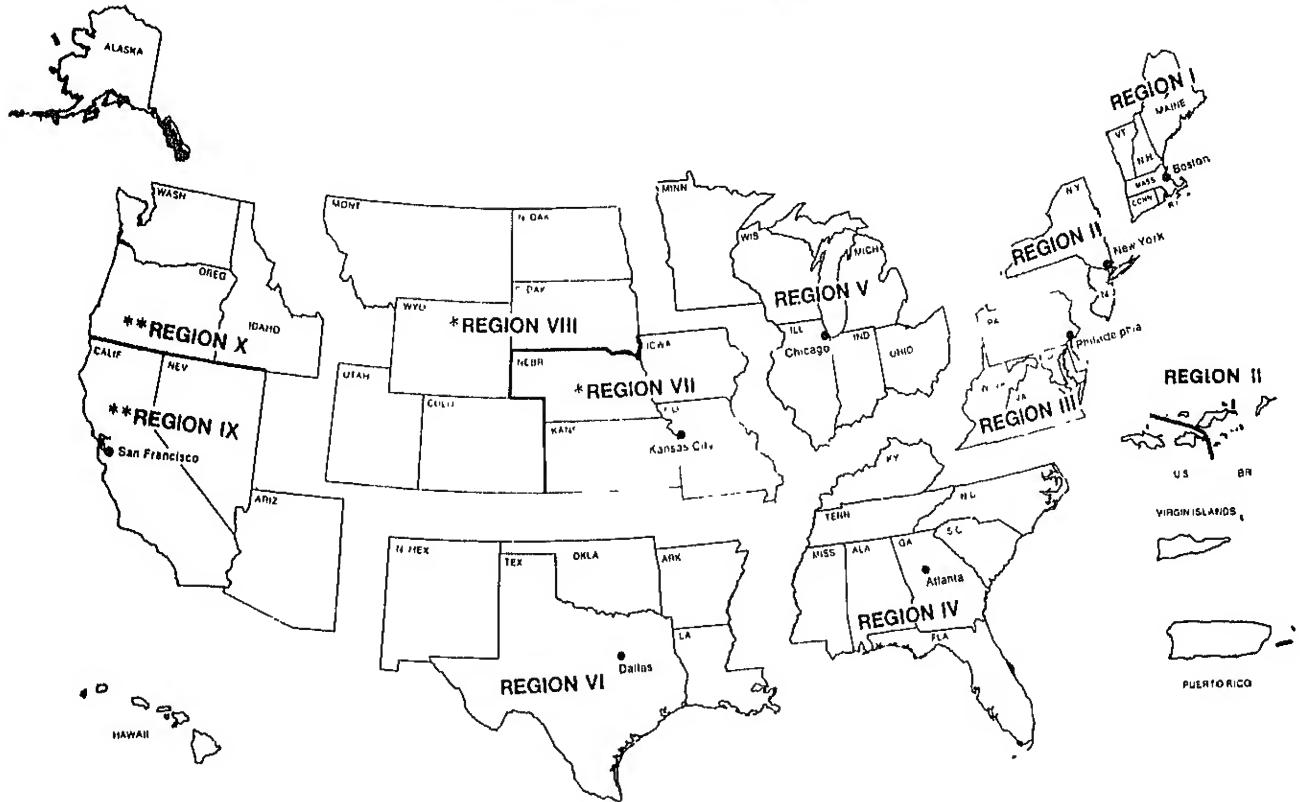
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## II. ECONOMIC INDICATORS

### A. Introduction

Many of the data series for manufacturing are republished in other periodicals of a more general economic nature. These documents are particularly useful in that they provide many series for total manufacturing drawn from several different sources as well as key economic indicators often useful in interpreting manufacturing data. This chapter is intended as a brief overview of the government's principal publications on economic indicators. It has been included as a reference for those who wish to examine publications of a general economic nature even though it does not relate exclusively to the manufacturing sector or the subjects of the following chapters.

Most of Commerce Department's economic indicators are published by its Bureau of Economic Analysis. Principal among these are the monthly Survey of Current Business and Business Conditions Digest.

### B. Survey of Current Business

The Survey is augmented by a weekly bulletin and a biennial supplement, both entitled "Business Statistics". The Biennial Supplement provides historical time series (back to 1947 in most cases) for general business indicators such as GNP, new plant and equipment expenditures, balance of payments accounts, farm income, business sales and inventories, prices, the labor force, and industrial production. The financial section includes data on banking, consumer credit, monetary statistics, and security markets. The commodity section covers such items as production, consumption, stocks, unfilled orders, etc., for specific commodities.

The monthly issue of the Survey of Current Business provides monthly data for the current and prior year for basically the same indicators covered in the Biennial Supplement. The monthly issue also contains special features, such as balance of payments and national income accounts in a set month of each year. The monthly surveys occasionally contain articles describing the methodology used in various statistical series used by BEA.

Most of the commodity series contained in the Surveys are drawn from sources such as Census, Bureau of Mines and the Departments of Agriculture, and Labor. These data are supplemented by data from trade associations and

other private sources. The Biennial Supplement to the Survey of Current Business contains detailed sources for each of the statistical series provided.

The weekly release, "Business Statistics" also is available on a subscription basis. It provides economic series such as housing starts, consumer prices, wholesale prices, and hours and earnings as they are released by the various agencies. The content of the weekly release varies, with each series published as it becomes available from the specific agency. Aside from the spot prices, certain fuel production figures, unemployment claims, and some financial indicators which are provided on a weekly basis--most series are given monthly for the four most recent months of the current year, and for two corresponding months of the prior year.

C. Business Conditions Digest

The Business Conditions Digest is a monthly report that brings together about 600 economic time series in both chart and table formats. Appendixes provide historical data, series descriptions, seasonal adjustment factors, and measure of variability. A computer tape containing data for most of the series is available for purchase.

The digest is divided into 6 major sections: national income and product, cyclical indicators, anticipations and intentions, other key indicators, analytical measures, and international comparisons.

D. Economic Indicators (Council of Economic Advisers)

The monthly publication, Economic Indicators is prepared for the Joint Economic Committee of the Congress by the Council of Economic Advisers. The statistical series for the publication are in many cases the same as the Business Conditions Digest and are drawn mainly from Commerce's Bureau of Economic Analysis and Census Bureau; the Federal Reserve Board, and the Bureau of Labor Statistics. The charts in the Economic Indicators are in a more simplified form and data are provided quarterly for the past two years and annually for the past eight. The Economic Indicators also provides slightly more detail, giving manufacturing data for both durable and nondurable goods.

## E. Regional Federal Reserve Banks

The regional banks of the federal reserve system each publish a monthly document that may contain articles of regional economic interest or various economic indicators. The federal reserve banks of Boston and St. Louis, for example, both publish economic indicators in their monthly issues. The Boston publication, "New England Economic Indicators" provides regional data by state that correspond to principal U.S. economic indicators.

(Note)

The publications provide data extracted from periodic press releases and publications of the collecting and compiling agencies. Many of these sources are mentioned later in this publication. The publications offices of these agencies can be contacted should the user want to obtain subscriptions to these specific periodic publications.

F. Contents of the "Economic Indicators"

Total Output, Income, and Spending

Nation's Income, Expenditure, and Saving  
Gross National Product or Expenditure  
National Income  
Sources of Personal Income  
Disposition of Personal Income  
Farm Income  
Corporate Profits  
Gross Private Domestic Investment  
Expenditures for New Plant and Equipment

Employment, Unemployment, and Wages

Status of the Labor Force  
Selected Measures of Unemployment and  
Part-Time Employment  
Unemployment Insurance Programs  
Non-agricultural Employment  
Weekly Hours of Work--Selected Industries  
Average Hourly and Weekly Earnings--Selected  
Industries

Production and Business Activity

Industrial Production  
Production of Selected Manufactures  
Weekly Indicators of Production  
New Construction  
New Housing Starts and Applications for  
Financing  
Business Sales and Inventories--Total and  
Trade  
Manufacturers' Shipments, Inventories, and  
New Orders  
Merchandise Exports and Imports  
U. S. Balances on Goods, Services, and  
Transfers  
U. S. Overall Balances on International  
Transactions

Prices

Consumer Prices  
Wholesale Prices  
Prices Received and Paid by Farmers

Money, Credit, and Security Markets

Money Stock

Private Liquid Asset Holdings--Non-financial  
Investors

Bank Loans, Investments, Debits, and Reserves

Consumer and Real Estate Credit

Bond Yields and Interest Rates

Common Stock Prices, Yield, and Earnings

Federal Finance

Federal Budget Receipts and Outlays and Debt

Federal Budget Receipts by Source and Outlays  
by Function

Federal Sector, National Income Accounts Basis

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\*Publication of the Council of Economic Advisers.

## G. Contents of the Business Conditions Digest

### National Income and Product

Gross National Product  
National and Personal Income  
Personal Consumption Expenditures  
Gross Private Domestic Investment  
Foreign Trade  
Government Purchases of Goods and Services  
Final Sales and Inventories  
National Income Components  
Saving  
Real Gross National Product  
Shares of GNP and National Income

### Cyclical Indicators

Employment and Unemployment  
Production, Income, Consumption, and Trade  
Fixed Capital Investment  
Inventories and Inventory Investment  
Prices, Costs, and Profits  
Money and Credit  
Composite Indexes

### Anticipations and Intentions

Aggregate Series  
Diffusion Indexes

### Other Key Indicators

Foreign Trade  
Balance of Payments and Major Components  
Federal Government Activities  
Price Movements  
Wages and Productivity  
Civilian Labor Force and Major Components

### Analytical Measures

Actual and Potential GNP  
Analytical Ratios  
Diffusion Indexes  
Selected Diffusion Index Components

International Comparisons\*

Consumer Prices  
Industrial Production  
Stock Prices

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\*with Canada, U.K., West Germany, France,  
Japan and Italy.



### III. CLASSIFICATIONS

#### A. Introduction

This chapter on classifications has been included in the Industry Data Guide to provide basic information to newcomers to the use of Federal industrial statistics.

The chapter shows the structure and basic uses of these principal classifications of U.S. and international statistics, and what bridges exist between one classification and another.

Attempts are continually being made towards the harmonization of major U.S. and international classifications. For this reason, and due to the detailed nature of classification structure and relationships, reference to the classification source itself, and contact with the administering agency is suggested if statistical projects involving their use of being undertaken.

As a result of the 1974 Trade Act, an interagency effort is underway to achieve greater correlation between U.S. production, and import and export statistics. Technical changes therefore will be required in the product classifications associated with domestic production based on the Standard Industrial Classification System (SIC), with imports under the Tariff Schedules of the United States (TSUS) and with exports under Schedule B. As of this writing the implementation of the first phase of this classification comparability program is planned for January 1, 1978.

An important reference on classifications is the Bureau of the Census' "U.S. Foreign Trade Statistics, Classifications and Cross-Classifications". This document is a useful aid for work involving U.S. Trade Statistics.

#### B. A Word About the Standard Industrial Classification and the Numerical List of Manufactured Products

An effort has been made in this publication to distinguish between the SIC classification and the SIC-based product classification (formally called the Numerical List of Manufactured Products).

The SIC is an establishment-based classification of industry groups and industries. The Numerical List of Manufactured Products (1972 SIC basis) is a product-based classification that codes the principal products of the manufacturing industries to the industry primarily responsible for their output.

The structure of the SIC is from 1 to 4 digits. The single digit denotes a major manufacturing sector and the 4 digits describe a particular industry. The 'Numerical List' classification is comprised principally of 7-digit individual products which are also grouped into 5-digit product classes.

Occasionally ambiguous references to these two classification systems may be encountered. It should be kept in mind that although the two systems are developed on the same numerical framework, one is a classification of manufacturing establishments, and the other is a classification of products.

### C. Selected Classifications

#### 1. Standard Industrial Classification (SIC)

The Standard Industrial Classification was developed by the Office of Management and Budget. It is the basic classification system used in the U.S. economic censuses. The SIC classifies establishments by the primary type of economic activity in which they are engaged. The primary activity of a manufacturing establishment is usually measured by its share of the value of production (as defined by the 7-digit product). These values are added to determine the assignment to the establishment of a 4-digit industry code. The methodology used in the 1972 revision is discussed in Appendix D of the new SIC manual.

The SIC is the principal classification system for Federal Government establishment statistics. In addition to Census data, the SIC is the basis for most labor statistics, and is used in various combinations by other agencies such as the Federal Reserve Board.

The first SIC manual was issued in 1941 and 1942 with revisions in 1945 and 1949, 1957, 1967 and 1972. The 1972 revision reflects principally identified increases in importance of new industries, combinations of small, declining industries, and the transfer of a few industries from one group to another. This revision is used for industry classification in the 1972 Census of Manufactures.

The classification has been changed so that all establishments primarily engaged in the same kind of economic activity are classified in the same four-digit industry, regardless of their types of ownership; hence, their owners may include such diverse legal organizations as corporations, partnerships, individual proprietors, government agencies, joint ventures, etc. Agencies are

requested, however, to publish separately summary data for the private and Government establishments constituting an industry group. These ownership sectors may be further subdivided by the classification scheme outlined on page 11 of the 1972 SIC Manual. The differences between the 1972 and 1967 classifications are itemized in appendices to the 1972 SIC Manual (on a 4-digit basis). The Bureau of the Census is not planning to adjust earlier statistical series for the classification changes.

Source: 1972 Standard Industrial Classification Manual

2. Numerical list of Manufactured Products  
(New (1972) SIC Basis)

This classification provides detailed product information for the coding of products and the collection and publication of production statistics for the Census of Manufactures.

The classification codes the principal products of the manufacturing industries to the industry primarily responsible for their output (i.e., the 4-digit SIC industry).

The 7-digit product code contains, as its first 5 digits, the product class of which it is a part, as its first 4 digits the industry in which it is primary, as its first 3 digits its primary group, and as its first 2 digits, its primary major group. The sixth and seventh digits of the product code are, taken together, unique and identify that product. Occasionally the sixth digit will be similar for a group of related products in the same product class, the sixth digit alone not being significant.

In general, unique codes are utilized for products for which detailed data are collected by the Bureau of the Census, in commodity surveys, such as the Current Industrial Reports, or occasionally by other Federal Government agencies. A detailed explanation of these codes can be found in the introduction to the Numerical List of Manufactured Products (New (1972) SIC Basis).

The 5,500 products covered in the 1972 Census of Manufactures, and the approximately 5,000 products covered in the Current Industrial Reports are grouped into 1,293 product classes.

In the Census Bureau's Annual Survey of Manufactures, shipments data are collected at the product class level only, thus making possible publication of annual data on output of all the manufacturing industries. Product classes are utilized in the censuses to show primary and secondary output of the manufacturing industries, and to permit publication of geographic data on product shipments, among other uses.

Source: Numerical List of Manufactured Products  
(New (1972) SIC Basis) 1972 Census of Manufactures

### 3. Wholesale Price Index Product Classification

The wholesale price index product classification follows commodity lines with products grouped by similarity of end-use or material composition.

In January 1971 the index was made up of 15 major groups, 87 subgroups, 291 product classes, 554 subproduct classes and 2,503 items. Additions and changes are made regularly to the classification and are noted in the "Wholesale Prices and Price indexes published by the Labor Department's Bureau of Labor Statistics.

The numbering system of the classification does not correspond to either the SIC or SITC, but concordances are available from the Bureau of Labor Statistics between the WPI Product classification and the SIC product classification and the SITC.

To meet the needs of index users, a number of special group indexes are calculated and published each month. Among these are indexes by stage of processing, durability of product and over 20 special group indexes (e.g. construction materials).

### 4. Industry Sector Price Index Classification

Since the 1950's, the growing need for comprehensive measures of industrial prices has led to the development of industry-sector price indexes based upon data collected for the WPI.

The Standard Industrial Classification (SIC) of the Office of Management and Budget provides the framework for the Industry-Sector Price Index classification scheme as described in the section on the SIC product classification.

Within this framework, individual products are given a 7-digit code by the Census Bureau. The product indexes are aggregated by BLS to 5-digit product classes and 4-digit SIC industries (using price indexes for important secondary products of the industry). Industry indexes can be aggregated to 3 and 2-digit SIC levels as well. Four-digit industry indexes can be aggregated to fit the sectoring plan of the latest Input-Output model.

Source: BLS Handbook of Methods, U.S. Department of Labor Bureau of Labor Statistics, (Bulletin 1711)

##### 5. Consumer Price Index Product Classification (CPI)

The CPI classification has been developed to provide a logical framework to divide the thousands of goods and services purchased by consumers into meaningful and manageable components. It provides the framework for the selection of the item sample and for the derivation of index weights.

The classification system is divided into two levels: the item level, and the "expenditure class" which is the strata to which allocations of items are made and within which probability samples of items are selected. The expenditure classes are primarily groupings of items which serve similar human needs. Items are grouped within an expenditure class so that they are as homogeneous as possible with respect to their physical characteristics.

The classification is not compatible with other major statistical classifications.

The 52 expenditure classes that comprise the CPI and the items contained in each class, are listed in the BLS Handbook of Methods.

6. The Federal Reserve Board Production Index Classifications  
(Industry Structure - Market Structure)

The Federal Reserve Board (FRB) classifications are SIC-based groupings used as a framework for the construction of indexes of industrial production. <sup>1/</sup> There is no published separate FRB numbering system. Rather, data is presented with the FRB classification title and the SIC equivalent.

The FRB industry structure is composed of 235 basic industry series, usually equivalent to 3 or 4-digit SIC industries or groups of industries. These series are combined in two different ways to produce the major market groupings and the major industry groupings that appear at the beginning of the monthly press release, "Industrial Production".

The major industry groupings represent aggregations of the 235 basic industry series at the industry group level (2-digit SIC). The market structure regroups the same 227 series on durability and end-use bases to facilitate general economic and business cycle analyses; and comparisons with GNP data. The principal market structure breakouts include consumer goods (durable and nondurable); equipment (business and defense); intermediate products, and materials.

7. TSUSA: Tariff Schedule of the United States Annotated

The Tariff Schedule of the U.S. (Annotated) (TSUSA) is the statistical classification used for the assessment of duty on dutiable articles imported into the United States. Over 10,000 items are specified in the classification. Each code is comprised of 7 digits--an item code of 5 digits and a statistical suffix of 2 digits. Codes are combined into 7 commodity schedules and an additional schedule detailing special classification provisions such as personal exemptions, governmental importations, samples, and articles admitted free of duty under bond.

<sup>1/</sup> Classification revisions made in 1971 have been carried back in detail to January, 1954 in the index of industrial production. In addition, for the 1947-53 period some revisions in the market structure have been introduced to provide categories generally similar to the post-1953 period. These revisions consist primarily of a much wider observance of 3 and 4 digit SIC groupings and a complete reordering of the industry structure in SIC sequential order. Further classification revisions made in 1976 are summarized in the chapter on production.

The seven commodity schedules are as follows:

1. Animal and Vegetable Products
2. Wood and Paper; Printed Matter
3. Textile Fibers and Textile Products
4. Chemicals and Related Products
5. Nonmetallic Minerals and Products
6. Metals and Metal Products
7. Specified Products; Miscellaneous and Non-enumerated Products

The TSUSA provides item and suffix codes, a detailed description of the article and the Most-Favored-Nation (MFN), and non-MFN rates of duty per specified unit of quantity. The TSUSA is updated regularly, listing changes in duties from previous rates and the classification changes of individual commodities.

Source: TSUSA

8. Schedule A: Statistical Classification of Commodities Imported into the U.S.

The Schedule A classification rearranges and summarizes the approximately 10,000 commodity classifications of the Tariff Schedule of the United States Annotated (TSUSA) into approximately 2,400 7-digit Schedule A classifications within the framework of the Standard International Trade Classification (SITC), Revised.

The numbering system provides for meaningful summaries of commodity coverage at 5-, 4-, 3-, 2-, and 1-digit levels of detail. At the 1-, 2-, and 3-digit levels, the numbering system of Schedule A is identical with that of the SITC. The commodity coverage is not always identical, but it is believed that for most statistical purposes the coverage at the 1-, 2-, and 3-digit levels can be considered essentially comparable with that of the SITC. Reasonable comparability for statistical purposes can also be expected, in most cases, when 5-digit Schedule A numbers are identical with SITC numbers.

The 6th and 7th digits are added to provide more detailed breakdowns where such detail appears to be justified to reflect U.S. import trade characteristics. These digits provide detailed data for commodities important in the U.S. import trade, and also permit data to be framed in terms of the SITC outline--comparable, insofar as possible, with foreign trade statistics compiled by other trading nations.

The Schedule A classification is published only as a listing of 7 digit codes and descriptions, and as a concordance with the TSUSA, SITC, and FT 990 codes in Section 6 to the U.S. Foreign Trade Statistics "Classifications and Cross-Classifications".

9. Schedule B: Statistical Classification of Domestic and Foreign Commodities Exported from the United States  
(updated annually)

The Schedule B is the official schedule of commodity classification used by shippers in reporting their export shipments from the U.S. and for use in compiling and reporting the official statistics on exports of merchandise from the United States, effective January 1, 1971.

The Schedule B classifications were developed from the most detailed level of the SITC--5 digit. The first 3 digits of the Schedule B classifications are essentially the same as the SITC.

The 7-digit codes in Schedule B were derived from the SITC from among the following methods:

1. Adopting 5-digit SITC codes without adjustment,
2. Adopting 5-digit SITC codes and making breakdowns to more detailed classifications within the original 5-digit SITC,
3. Combining 5-digit SITC codes without further breakdowns, and;
4. Combining 5-digit SITC codes and then making breakdowns to more detailed classifications within the SITC combinations.

Over two-thirds of the 5-digit classifications of the SITC fall in the first two methods listed above. The Schedule B classifications are essentially comparable to the SITC in these cases, with the sum of the coverage of all of the 7-digit Schedule B classifications being comparable to the coverage of the 5-digit SITC item number. Differences between the Schedule B classification and the SITC can be found in the Schedule B, itself, and also in the volume entitled Foreign Trade Statistics, "Classifications and Cross-Classifications" published by the Bureau of the Census.

Source: Schedule B

10. The FT 990 Codes

The Ft 990 Codes are summary groupings of U.S. foreign trade statistics (Schedules A & B), used only by the Bureau of the Census. These codes are used for commodity groupings published in the Census publication, FT 990 "Highlights of U.S. Export and Import Trade".

The U.S. Foreign Trade Statistics "Classifications and Cross-Classifications", shows the FT990 groupings for both Schedule A and Schedule B numbers.

Source: U.S. Foreign Trade Statistics

11. SIC Based Import and Export Product Codes

The purpose of the SIC-based export and import product codes is to provide to the greatest extent possible a statistical link between trade data and manufacturing output statistics. An exact correlation is not possible because the trade classifications are structurally different from the SIC. There is a need for both export and import codes because the SITC and TSUSA classifications from which they are derived are not identical and coverage under individual product code assignments may differ.

The 2,400 SIC import product codes are derived from the rearrangement of the 10,000 items classified in the TSUSA. The 1,700 SIC export product codes are derived from the 4,000 categories of the Schedule B.

The method of construction for both the export and the import codes is the same. The words TSUSA and import codes can be substituted for Schedule B and export codes throughout the following summary methodology.

1. Individual Schedule B numbers were assigned to the 5-digit SIC product class containing the same products.
2. In cases where the Schedule B product would appear to fall into two or more 5-digit SIC codes, the product was assigned to the SIC code appearing to contain the principal bulk of the Schedule B number.
3. If such an assignment as in Step 2 would cause significant distortion of the classification, two 5-digit SIC codes would be combined, and the Schedule B number assigned to that classification. The sixth digit of the classification is an alpha code designating the number and digit-level of SIC combinations made for that particular code (see U.S. Foreign Trade Statistics: "Classifications and Cross-Classifications" for a key to the alpha code symbols).
4. The 7th and 8th digits are further subdivisions of the 6 digit codes, and have been created to yield export and import classifications comparable to the SIC output classifications.

Source: FTS

## 12. End Use Export and Import Classification

The End-Use Classifications were developed by the Department of Commerce' Bureau of Economic Analysis<sup>1/</sup> to provide broad summary commodity categories (derived from the Schedule B and the TSUSA, respectively), based on a concept of end-use demand. Smaller breakdowns within categories are based on the essential physical properties or stage of production of a commodity (i.e., manufactured/non-manufactured; durable/nondurable).

1/ Then called the Office of Business Economics

Source: FTS

The End-Use Classification system provides a convenient statistical tool for econometric analysis and forecasting, correlating U.S. export and import movements to appropriate domestic and foreign demand indicators.

The End-Use Import Classification represents the regrouping of the 10,000 TSUSA commodity numbers into 112 4-digit summary commodity groupings, further aggregated into 6 one-digit categories. The End-Use Export Classification represents the grouping of 4,000 Schedule B categories into 115 four-digit categories. These are summarized into 7 one-digit categories, the additional one (over the import classification) being "special category exports (military-type goods)".

13. International Standard Industrial Classification (ISIC)

The ISIC was adopted in 1948 and has since been revised at ten year intervals. Its purpose is to provide a framework for the international comparisons of national statistics by kind of economic activity.

Like the U.S. SIC, the ISIC for manufacturing activity is based on the establishment which is classified according to the principal type of goods produced. The International Industrial Classification does not draw distinctions according to the kind of ownership.

A comprehensive discussion of the ISIC and its methodology are available in the U.N. Statistical Papers, Series M No. 4, rev. 2., "International Standard Industrial Classification of All Economic Activities," New York, 1968. This document also contains the classification itself, and a list of differences between it and the preceding ISIC classification.

Correlation tables between the ISIC and the 1967 SIC are available in technical paper 20, Correlation Between United States and International Standard Industrial Classifications, U.S. Bureau of the Census, U.S. GPO, Washington, D.C. 1969.

Sources: Cited above

#### 14. Standard International Trade Classification (SITC)

The SITC is a product-oriented code designed to classify all commodities entering external merchandise trade, i.e., all goods whose movement into or out of the country adds to or subtracts from the material resources of the country. By 1960 governments of countries accounting for about 80 percent of world trade were compiling trade-by-commodity data by SITC, which is also used by principal international agencies compiling world trade statistics. The SITC provides commodity aggregates needed for purposes of economic analysis and facilitates the analysis of trade data by commodity line.

The original SITC was drawn up in 1950 by the U.N. Secretariat. The classification was revised in 1960 and again in 1975 to achieve a greater degree of compatibility between it and the Brussels Tariff Nomenclature. SITC consists of BTN items rearranged in a statistical order. The two sets of numbers are in one-to-one correspondence.

The U.N. M38, Commodity Indexes for the Standard International Trade Classification, provides 5-digit SITC and 4-digit BTN numbers for approximately 45,000 commodities entering international trade.

Source: United Nations Standard International Trade Classification. M4, M34.

#### 15. NIMEXE: The Harmonized Nomenclature For the Foreign Trade Statistics of the EEC Countries

NIMEXE is a common list of descriptions of goods (to which national classifications of EEC member countries were adapted) initiated in 1966.

The 1969 revision reflects changes made in the EEC customs tariff as a result of the Kennedy round negotiations, and has substantially improved product-basis comparability for each nation's statistics.

The NIMEXE is a subdivision for statistical purposes, of the Common Customs Tariff of the European Communities (CCI) which was in turn developed from the BTN (Nomenclature for the Classification of Goods in Customs Tariffs--i.e. the "Brussels Nomenclature"). The NIMEXE is used among European countries primarily during commercial and tariff negotiations.

The NIMEXE is also structured to permit a ready concordance with the SITC.

Source: NIMEXE

## 16. Input-Output Classification (1967)

The Input-Output classification was developed in 1958 on the framework of the 4 digit SIC and has been revised with subsequent revisions of the I-O tables. The latest revision brings the I-O classification into compatibility with the 1967 SIC.

For the 1967 Input-Output Study, all productive activities of the U.S. economy have been classified into 484 industries, which in turn have been aggregated to 367 and 85-industry levels. The 85 industry and the 367 industry tables have been published; the 484 industry tables are available only on computer tape.

The 367 industry level contains essentially the same industry groupings as those for the 1963 input-output table. All of the industries except government enterprises, and dummy and special industries are equivalent to individual industries or combinations of industries as defined in the SIC Manual, 1967 edition.

In making these combinations an important objective was the achievement of homogeneity in terms of the input patterns which characterize the various products and activities included in single industrial category. An alternative criterion was similarity of use patterns. In a few cases, combinations were made when the output of one industry was used entirely by another industry. Also, small or miscellaneous type industries were frequently combined.

In order to simplify the analysis of certain classes of activity, several synthetic or "dummy" industries were established. Such industries generally consist of numerous commodities or services, originating in different industries, whose use is related to a common activity and for which information on consumption is generally limited to the group as a whole. Within the manufacturing sector there is usually a one to one correspondence between the I-O classification and the SIC.

Each of the published Input-Output volumes and the February, 1974 issue of the Survey of Current Business contain the Input-Output Classification (367 sector) and a concordance between it and the SIC. The 484 sector concordance is available from the Bureau of Economic Analysis, but has not been published.

Source: I-O Classification; I-O Structure of the U.S. Economy, Definitions and Conventions of the 1967 Input-Output Study.

## 17. Enterprise Standard Industrial Classification (ESIC)

This classification was developed to provide a standard for use with statistics about enterprises (i.e., companies, rather than their individual establishments) by kind of economic activity. Its use facilitates the collection, tabulation, presentation, and analysis of data relating to enterprises; and will promote uniformity and comparability in the statistical data of federal government agencies. The classification of enterprises, rather than that of their constituent establishments, is used for compiling and analyzing financial and related statistics (such as income, expenses, and profits from the income statement; debt, liquidity, and other balance sheet items; and other data that may be available only on an enterprise basis).

The enterprise unit consists of all establishments under common direct or indirect ownership. It is defined to include all entities, including subsidiaries, where there is more than 50 percent ownership.

The classification covers the entire field of economic activities, including manufacturing.

The structure is defined by and follows closely the structure of the Standard Industrial Classification used for the classification of establishments, thus providing a means for linking establishment statistics and enterprise statistics.

The detailed enterprise industry code of the classification is a four-digit number with a decimal point placed between the second and third digits to distinguish visually the Enterprise from the Establishment SIC numbering system. The first two digits of the code represent the Major Group, similar to that for the establishment SIC. The third and fourth digits represent the subdivision.

The Enterprise SIC Manual provides a 4-digit concordance with the SIC, and lists changes made in 1972 from the 1968 version.

Source: Office of Management and Budget, Enterprise Standard Industrial Classification Manual, 1974

18. Commodity Classification for Transportation Statistics (CCTS)

The Commodity Classification for Transportation Statistics was developed primarily for use in the collection, presentation and analysis of commodity data associated with the Census of Transportation, and commodity statistics collected by the Interstate Commerce Commission.

The structure of the classification represents adaptation of the Standard Industrial Classification product classes to facilitate analysis of these data in conjunction with production data.

The 5-digit products or groups of products have been selected on the basis of (1) being significant revenue producing items for one or more modes of transport; (2) detail frequently utilized for commodity descriptions on bills of lading; and (3) items or groups of items for which production data are readily available.

The commodity classification for transportation, (referred to in the Census of Transportation as TCC) includes agriculture, forestry, fisheries, and mining as well as manufacturing.

Information concerning the concordance between the CCTS and the SIC can be obtained from the Statistical Policy Division, Office of Management and Budget.

19. Standard Transportation Commodity Code

The Standard Transportation Commodity Code is the classification designed and used by the American Association of Railroads. For most purposes, this classification can be considered compatible with the CCTS at the 5-digit level. However, it provides a higher degree of detail, 7 digits.

D. STRUCTURE OF PRINCIPAL CLASSIFICATIONS

Table 1. STANDARD INDUSTRIAL CLASSIFICATION (1972)<sup>1/</sup>

Number of Digits	Classification	Number of Items at Level (approx.)	Example
2	Major industry group	20 (72)	<u>33</u> Primary metal industries
3	Industry group	143 (382)	<u>335</u> Rolling, Drawing & Extruding of non-ferrous metals
4	Industry	451 (917)	<u>3351</u> Rolling, Drawing & Extruding of copper

<sup>1/</sup> (Manufacturing classifications 20-39)

Numbers in parentheses indicate item count for all commodities/services

Table 2. NUMERICAL LIST OF MANUFACTURED PRODUCTS  
(New (1972) SIC Basis)

Number of digits	Classification	Number of Items at level (approx.)	Example
5	Product class	1293	<u>33515</u> Copper & Copper-base alloy pipe and tube
6	Identification digit	--	<u>33515 36</u> Copper base alloy pipe and tube, plumbing
7	Product	5,500 - Census of Manufacturers* product data 5,000 - Current Industrial Reports	
8	Check digit	--	

\* More comprehensive data is collected for the Current Industrial Reports. The pertinent data from these reports are incorporated in the Census of Manufactures.

Table 3. STANDARD INTERNATIONAL TRADE CLASSIFICATION  
(SITC)

Number of Digits	Classification	Number of Items at Level (approx.)	Example
1	Section-broad economic categories	10	<u>Sect. 6</u> Manufactured goods classified chiefly by material
2	Division	56	<u>Div. 68</u> Non-ferrous metals
3	Groups	177	<u>Group 682</u> Copper
4	Subgroups	625	<u>Subgroup 682.2</u> Copper and alloys of copper, worked
5	Items (subsidiary headings for 257 subgroups)*	944	<u>Subsidiary heading 682.26</u> Tube and pipe fittings of copper

\* To provide exact correspondence with the BTN and provide additional detail of economic interest.

NOTE: Revision planned for publication in 1976.

Table 4. INTERNATIONAL STANDARD INDUSTRIAL CLASSIFICATION (ISIC)

Number of Digits	Classification	Number of Items at Level (approx.)	Example
1	Major Divisions	10 total 1 mfg.	3. Manufacturing
2	Divisions	33 total 9 mfg.	36. Manufacture of Non-Metallic Mineral Products Products except Products of Petroleum and Coal
3	Major Groups	73 total 29 mfg.	369. Manufacture of other non-metalllic mineral products.
4	Groups	158 total 81 mfg.	3691. Manufacture of structural clay products (detailed description)
			3692. Manufacture of cement, lime and plaster (detailed description)
			3699. Manufacture of non- metallic mineral products, not elsewhere classified (detailed description)

## E. CLASSIFICATIONS SUMMARY

Classification	Highest Level of Detail	Basis of Classification	Number of Detailed Items	Major Data Types <sup>1/</sup>	Principal Concordances	Publication Order Data
Standard Industrial Classification (SIC)	4-digit	Establishment	Mfg. 450 Total, 1,000	Census-Annual Survey of Mfg. Census of Manufactures; BLS-Employment, Hours and Earnings; Industry Sector Price Indexes, Productivity Indexes, Price-Census- County Business Patterns	ISIC (1967) I/O Industry Classification	Standard Industrial Classification Manual, 1972. Office of Management and Budget, GPO Stock No. 4101-0066
Numerical List of Manufactured Products (New (1972) SIC Basis)	5-digit	Product	Mfg.-1300	Census-Annual Survey Manufactures Product shipments, CENSIS OF MANUFACTURES: Industry Product Analysis, Indexes of Production BLS-Industry Sector Price Indexes.	U.S. Bureau of the Census, Census of Manufactures - 1972/Series MC72-1.2 GPO. Numerical List of Manufactured Products (New (1972) SIC Basis)	
Numerical List of Manufactured Products (New (1972) SIC Basis)	7-digit	Product	Mfg.-11,500	Census Product Shipments, (Census of Mfrs.) Production, Shipments, Inventories (Current Industrial Reports)	U.S. Bureau of the Census, Census of Manufactures - 1972/Series MC72-1.2 GPO. Numerical List of Manufactured Products (New (1972) SIC Basis)	
Tariff Synthetic Organic Chemical Production Classification	9-digit	Product	Chem.Mfg. 5,000	Tariff-Production Unit Values, and sales Major manufacturers	SIC	
FRB Industry Production Classification (Industry Structure/Market Structure).	4-digit	Product	Mfg.-7200 Total-225	FRB-Industrial Production Indexes	Industrial Production, 1971 ed., Board of Governors of the Federal Reserve System, Washington, D.C. 20551. Publication Services	
FRB Market Grouping Classification	2-4-digit	Product	Mfg. 200 Total - 225	FRB-Industrial Production Indexes	Industrial Production, 1971 ed., Board of Governors, Federal Reserve System, Washington, D.C. 20551. Publication Services	
WPI Product Classification	8-digit	Product	Total - 2,691	BLS-Wholesale Prices and price indexes	Wholesale Prices and Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics	
Standard International Trade Classification (SIC)	5-digit	Product	1,312	U.N. Trade Data	BTN-4-digit, Part 5-digit level, Schedule A/MSUSA (5) Schedule B	M 4 Index to the SITC, M 34 Standard International Trade Classification, Revision #2, 1975, Statistical Office of the United Nations, New York

1/ See the Foreign Trade Section for the titles of U.S. Foreign trade periodicals (FT series)

Classification	Highest Level of Detail	Basis of Classification	Number of Detailed Items	Major Data Types <sup>1/</sup>	Principal Concordances*	Publication Order Data
SIC-Based Export Product Classification	8-digit	Product	2,400	Census FT 610	Schedule B; SITC; SIC-based Output Product Code (at 5 digit level); 2/ End Use	U.S. Bureau of the Census U.S. Foreign Trade Statistics "Classifications" and Cross-Classifications* 1974 G.P.O.
SIC-Based Import Product Classification	8-digit	Product	1,700	Census FT 210	TSUSA-7; Schedule A; SIC-based Output Product Code (at 5 digit level), 2/ End Use	U.S. Bureau of the Census U.S. Foreign Trade Statistics "Classifications" and Cross-Classifications* 1974 G.P.O.
International Standard Industrial Classification (ISIC)	4-digit	Establishment	Mfg. - 81 Total - 158	U.N.-Industry Statistics	SIC SITC	International Standard Industrial Classification of All Economies Stat/Ser. United Nations, New York; M/4/Rev. 2, Sales No. E.68.XVII.8
ISIC Industrial Product Classification	6-digit	Product	Mfg.-300	U.N.-Commodity Production (quantity only)	SITC	Published as an Appendix to The Growth of World Industry, United Nations, New York, N.Y.; 1972, Sales No. E.72.XVII.9
End-Use Export Classification	4-digit	Product	115 + 3-1	FT 990, U.S. Foreign trade highlights digit summarization categories	Schedule B (7)	U.S. Bureau of the Census U.S. Foreign Trade Statistics "Classifications" and Cross-Classifications* 1970 G.P.O.
End-Use Import Classification	4-digit	Product	112	FT 990	TSUSA (7); Schedule A	U.S. Bureau of the Census U.S. Foreign Trade Statistics "Classifications" and Cross-Classifications* 1970 G.P.O.
FT-990 Export Classification	3-digit	Product	116	FT 990	SITC Schedule B (1-7) (used by Census only)	Not Available
FT-990 Import Classification	3-digit	Product	140	FT-990	FT-990 SITC/ Schedule A (1-7) (used by Census only)	Not Available

<sup>1/</sup> See the Foreign Trade Section for the titles of U.S. Foreign Trade Periodicals (FT series).

<sup>2/</sup> Differences between SIC output product codes and trade product codes appear as appendices to specific foreign trade publications. (Census FT series).

\* Numbers in parentheses indicate the level of detail provided for the classification in the concordance.

Classification	Highest Level of Detail	Basis of Classification	Number of Detailed Items	Major Data Types <sup>1/</sup>	Principal Concordances*	Publication Order Data
Schedule B Export Classification	7-digit	Product	4,000	Census FT 410, FT 445	SIC-based Export Product code; End-Use Export Classification; SITC	U.S. Bureau of the Census, Schedule B Statistical Classification of Domestic and Foreign Commodities Exported from the U.S. - 1911. G.P.O.
Tariff Schedule of the United States Annotated (TSUSA)	7-digit	Product	10,000	Census FT 146, FT 155	Schedule A (7) SIC-based Import Product Code (7) End-Use Import Classification (4)	Tariff Schedule of the U.S. Annotated (1974) TC publication 452 G.P.O.
Schedule A Import Classification	7-digit	Product	2,400	Census FT 900, FT 135, FT 155	TSUSA (5-7) SITC (5) FT 990 (3)	Not published
Brussels Nomenclature (BNN)	5-digit	Product			SITC	Brussels Nomenclature 40 rue Washington Brussels, Belgium
Standardized Nomenclature of the External Trade Statistics of the European Commission Countries (NIMEX)	6-digit	Product	5,800		SITC (5)	Statistical Office of the European Communities, Luxembourg, Centre Longwy, P.O. Box 130
BEA Input-Output Industry Classification	4-digit	Product	1967- 85 sectors 367 industries	BEA-Input-Output Structure of U.S. Economy	SIC	Input-Output Structure of the U.S. Economy, 1967 U.S. Dept. of Commerce, 1974 U.S. G.P.O. (3 vols.)
Standard Enterprise Classification (SEC)	4-digit	Company	Mfg. -100	FTC-Quarterly Financial Statistics for Manufacturing Corporations	SIC	Enterprise Standard Industrial Classification Manual, 1974. Office of Management and Budget, G.P.O. Stock #4101-00091
Commodity Classification for Transportation Statistics (CCTS)	5-digit	Product	Mfg-800** Total - 1,000**	Census-Export and Import Unit Value Indexes	CCIS-SIC (4-digit)	Not Published
Economic Class Codes	1-digit	Major Sector	5			

1/ See The Foreign Trade Section for the titles of U.S. Foreign Trade periodicals (FT series).

\* Numbers in parentheses indicate the level of detail provided for the classification in the concordance.

\*\* Approximate

**A. Introduction**

This chapter will discuss two categories of manufacturing characteristics. The first of these, covered by the Census of Manufactures and the Annual Survey of Manufactures, provides data on employment, payroll, value added, value of shipments, cost of materials, inventories and capital expenditures, on industry, product class, and geographic bases. The second category deals with particular characteristics that are covered in separate publications: input-output, capacity utilization and research and development.

**B. General Manufacturing Statistics**

1. The Census of Manufactures is published every 5 years and the Annual Survey of Manufactures is published annually. For the 1972 Census of Manufactures, questionnaires were mailed to all multiunit companies and all single unit establishments with 10 or more paid employees. For approximately 130,000 single unit establishments with less than 10 employees, information is obtained from administrative records. Although these small firms account for about 40 percent of all manufacturing firms, they account for less than 3 percent of manufacturing activity.

The Bureau of the Census publishes preliminary reports from the Census of Manufactures for each state and industry data in 440 separate reports covering 450 industries or combinations of industries. These reports appear generally a year prior to the publication of the final reports and contain the general statistics by industry, and quantity and value of products and of materials consumed by kind.

2. The Annual Survey of Manufactures is a probability sample of about 70,000 manufacturers drawn from the Census of Manufactures and supplemented by Social Security Administration lists of new establishments. All establishments with over 250 employees in the preceding Census are included in the sample.

The Census of Manufactures and Annual Survey of Manufactures are both collected on an establishment basis. The establishments are assigned an industry classification reflecting its primary activity (usually defined as its relative share of the value of production by 7-digit product) these product values are then summed to determine the establishment's 4 digit industry code. The Census Bureau has developed a "resistance formula" to prevent highly diversified establishments from shifting from one industry category to another in successive years unless there is a significant change in their product specialization.

The Census Bureau employs the Standard Industrial Classification (SIC) in its tabulations of economic data. The latest Census uses the 1972 revision of the SIC, while the previous one followed the 1967 classification. Tables are provided displaying the differences between the two versions. A complete list of the changes appears at the rear of the 1972 SIC manual. These changes should be checked if any time series are being studied because the Census Bureau has no plans to adjust historical data.

The Census of Manufactures and the Annual Survey of Manufactures provide substantially the same statistics. The Census has, however, more comprehensive coverage and provides data in greater detail, particularly in subject areas such as inventories, plant and equipment expenditures, and materials consumed. It also provides industry-product analyses not covered in the Annual Survey.

The Annual Survey is organized into nine chapters covering general statistics, inventories, energy consumption, plant and equipment expenditures, book value of assets, labor costs, and geographic statistics. Industry profiles containing time series of basic statistics and selected operating ratios by 4 digit industry are also published as a part of the Survey.

The Census of Manufactures is segmented into 3 major parts: Summary and Subject Statistics, Industry Statistics, and Area (Geographic) Statistics. These are supplemented by a series of special reports such as "Indexes of Production" (discussed in the Chapter on Production), and "The Location of Manufacturing Plants." 1/

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1/ "The Location of Manufacturing Plants" will be available only on computer tape.

### 3. Current Industrial Reports

More timely data on manufacturing activity is available in the Current Industrial Reports. The reports are published usually at the 3-digit SIC level, but contain detailed commodity data at the 7-digit level. Reports usually provide production and quantity and value of shipments data, but some series also contain information on consumption, inventories and orders, and some geographic data. A listing of the reports by series is provided at the end of the chapter. The Census "Guide to Industrial Statistics" contains a list of data types contained in each report.

The primary report published under the Current Industrial Report Series is the Manufacturers' Shipments Inventories and Orders, M3-1, (both seasonally adjusted and unadjusted), published monthly and benchmarked to the Annual Survey of Manufactures. The report is drawn from a monthly reporting panel of approximately 5,000 reporting units including almost all companies with 1,000 or more employees.

The monthly survey, M3-1, does not provide information at the 4-digit SIC industry detail because of the relatively small size of the reporting panel and the fact that most companies cannot provide shipments, inventories and orders data monthly for individual establishments. Definitions of terms used in the monthly survey and an additional discussion of the survey are included in both monthly and annual publications of "Manufacturers' Shipments, Inventories, and Orders".

### 4. County Business Patterns

The County Business Patterns (CBP) is an annual publication of the Bureau of the Census. The series consists of a separate volume for each state and a summary volume for the United States. The existing CBP program provides statistics on reporting units, first quarter FICA taxable payroll, and March 12 pay period employment by industrial classification and county location. The data are primarily derived from employment and taxable payroll information reported on Treasury Form 941, Schedule A. Supplemental information is provided by a special survey of multi-location companies.

An expanded, revised program to be implemented in the 1974 issue (to be published in 1976) will increase the data provided, and increase coverage to include most sectors of the economy. The inclusion of data collected on Bureau of the Census Annual Company Organization Survey will permit the revised program to publish data on total payroll for the entire year, thus overcoming one of the inherent drawbacks of the present program which fails to identify seasonal operations. The Company Organization Survey will allow for the reporting of statistics on an establishment rather than a reporting unit basis.

#### 5. Enterprise Statistics

The Enterprise Statistics program is developed by regrouping census data records of establishments under common ownership or control in order to show various economic characteristics of the owning or controlling firm. Enterprise statistics are the last data to be published in the economic censuses program. Statistics for the enterprise establishment relationships (Vol. 1: General Report on Industrial Organization) are tabulated by type of company organization, by company size, and by industry classification, as well as by cross tabulations which indicate company industrial diversification patterns. Two other volumes included in the series are "Central Administrative Offices and Auxiliaries" and "Link of Census Establishment and IRS Corporation Data".

The individual reports in the Enterprise statistics series are described in the Census' publication "Mini-Guide to the 1972 Economic Censuses", and in the individual Enterprise Statistics Publications.

#### 6. Guides to Census Publications

The Census Bureau publishes a variety of guides and catalogues to its numerous publications. The "Mini-Guide" to the 1972 Economic Censuses" provides a useful summary of all the major economic censuses: retail and wholesale trade, selected services, manufactures, minerals, construction industries, transportation, as well as descriptions of the enterprise statistics.

The Bureau also publishes comprehensive catalogues of its publications on a semi-annual basis, and in 1972 published a catalogue covering all Census publications from 1790. These catalogs contain brief descriptions of the data content and timing of the publications, and trace the appearance of the same type of data in different publications over a period of time.

A "Guide to Industrial Statistics" published by the Census Bureau features a detailed locator guide by data type for manufacturing statistics. It also contains explanatory chapters on the Standard Industrial Classification, geographic areas and statistical terms, and a discussion of the Census Bureau's Industrial Statistics Program. A new edition of this Guide will be published in 1977.

Other relevant Census guides include:

Guide to Programs and Publications "Subjects and Areas"  
Guide to Census Bureau Data Files and Special  
Tabulations.

C. Input-Output

The Input-Output Structure of the U.S. Economy is issued periodically by the Bureau of Economic Analysis of the Department of Commerce. Its release lags that of the economic censuses associated with it by several years because the results of these censuses are required for the compilation of the input-output tables. The 1967 Input-Output tables appeared early in 1974.

The results of the 1967 Input-Output study is presented in three basic tables--the transactions or flow table, the direct requirements table and the total requirements table. The transactions table enables the user to follow the flow of goods produced by each industry to other industries and to components of final demand. The requirements table allows the user to trace the source of inputs required for the production of goods in each industry.

The Input-Output classification has been developed from the framework of the 4-digit SIC and has a high degree of correspondence with it in the manufacturing sectors. A concordance between the two is provided at the front of each volume of the three volume set.

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The input-output tables are published for 85 and 367 industry sectors. The 484 industry sector tables are available only for the transactions tables and only on computer tape.

Two publications are available that explain the Input-Output tables: "The Input-Output Structure of the U.S. Economy: 1967", a reprint from the February 1974 Survey of Current Business; and "Definitions and Conventions of the 1967 Input-Output Study" available from the Interindustry Economics Division (BE-51) Bureau of Economic Analysis, U.S. Department of Commerce, Washington, D.C. 20230.

D. Research and Development

The industrial research and development data described in this chapter are published by the National Science Foundation from an annual survey conducted by the Bureau of the Census. The survey is a written questionnaire mailed to 1,400 companies drawn from a sample of 8,000 companies representing all manufacturing industries and those non-manufacturing industries known to conduct or finance industrial R&D. Companies with employment of 1,000 or more in the Census Enterprise Statistics multi-unit file are included in the sample with certainty. Manufacturing companies with fewer than 1,000 employees were sampled at rates depending upon their industries and employment size based upon 1967 Census Enterprise Statistics multi-unit file and the Census of Manufactures universe file. About 1,200 of the companies surveyed are certainty companies that accounted for over 90 percent of the total R&D performance funds.

The standard errors of estimates for each industry for all companies, and for those with fewer than 1,000 employees, are shown in the appendix to the publication.

Each year the annual Department of Defense and National Aeronautics and Space Administration lists of R&D contractors are reviewed to insure the inclusion of large contractors in the sample.

A more comprehensive discussion of the survey methodology is provided in the introduction to Research and Development in Industry published by the National Science Foundation.

E. Measures of Capacity Utilization

1. "Measures of Capacity Utilization" (Federal Reserve Board)

The Federal Reserve Board publishes two measures of capacity utilization: capacity utilization in materials industries and manufacturing capacity utilization.

a. The "materials industries capacity utilization series" represents a revision of the earlier major materials capacity utilization series, expanded to include all materials components of the Index of Industrial Production (IP). Total materials, which include a variety of finished durable materials such as steel mill products and various parts and components which were not represented in the earlier series represent about two-fifths of the value added in the industrial production index; major materials had represented less than one-tenth. The expanded series thus present a more comprehensive picture of cyclical movements in utilization of materials.

In the materials capacity utilization series, capacity utilization rates for individual series generally are based on estimates of end-of-year capacity and December output levels (at annual rates) in units appropriate for the individual industry. These physical unit data are used to estimate preliminary utilization rates for December. The preliminary rates are then used to derive an index of capacity comparable to the IP series by dividing the preliminary rate into the appropriate December IP series (not seasonally adjusted). This step, in effect benchmarks the capacity series to the IP series. Quarterly estimates of capacity are derived for most series by interpolating linearly between adjacent pairs of year-end capacity indexes. The quarterly utilization rate for each industry is quarterly average output (seasonally adjusted) divided by average capacity for the quarter.

Revisions in methods and series changes in the materials capacity utilization measures will be published in a fall, 1976 issue of the Federal Reserve Bulletin.

b. The "manufacturing capacity utilization index" is published in a separate press release (series E.5, "Capacity Utilization in Manufacturing").

The general level and major movements of manufacturing capacity utilization in the estimates are drawn from McGraw-Hill surveys of capacity utilization of manufacturing companies. Dividing these utilization rates into Federal Reserve indexes of production gives the general level and trend of the capacity estimates. The final capacity estimates are extrapolated before the first utilization survey and after the most recent one through the use of capital stock estimates and McGraw-Hill survey information on yearly capacity changes. These two sources of information are also used to smooth the capacity estimates during the period of the utilization surveys.

It should be noted that estimates of manufacturing capacity and capacity utilization are subject to significantly larger measurement errors than many other time series in common use.

A detailed discussion of the derivation of the manufacturing capacity and capacity utilization estimates is provided in an FRB staff economic study by Frank de Leeuw entitled "A Revised Index of Manufacturing Capacity". This article appeared in the FR Bulletin of November, 1966, and is also available as a reprint from the Federal Reserve Board.

## 2. Capacity Utilization (Bureau of Economic Analysis)

The Commerce Department's Bureau of Economic Analysis introduced series of capacity utilization in the July, 1974 issue of the Survey of Current Business. They are quarterly, cover all manufacturers, and provide break-outs by industry and by asset-size class. Both actual and preferred utilization rates are presented. The series are available for year-end 1965, for mid-year and year-end 1966 and 1967, and for the end of each quarter from 1967 to date.

The BEA series provides detail by asset-size classes for all manufacturers, and durable and non-durable goods groups. Capacity utilization rates are also published for primary and advanced processing industries. The 12 industries published separately in the series are: food and beverages; textiles; paper; chemicals; petroleum; rubber; primary metals 1/; electrical machinery; machinery except electrical; motor vehicles; aircraft; and stone, clay and glass.

1/ Available beginning March, 1973

The BEA survey is based on a quarterly sample of 2,400 firms which accounted, in 1973, for 75 percent of gross depreciable assets held by manufacturers in 1969.

Capacity utilization rates were derived by assigning each company in the BEA reporting panel to one of 25 industries and to one of three asset-size classes. This assignment was based on the company's 1969 primary activities and total assets as reported in BEA's Plant and Equipment Expenditures Survey.

Because current capacity weights are not available for each time period, BEA combined data from several sources to estimate capacity weights for 1969. The weights will be revised when Census Enterprise Statistics for 1972 become available.

Gross depreciable assets for 1969 reported by the companies were used to combine company rates into rates for industry asset-size classes. Gross depreciable assets in each industry asset-size class reported by the IRS in Statistics of Income: 1969 were used to combine rates by asset-size classes within an industry into an overall industry rate.

For combining industries into broad groups, values of manufacturing capacity by industry were estimated for 1969 by dividing 1969 shipments by 1969 capacity utilization rates.

Seasonal factors and seasonally adjusted capacity utilization rates are computed separately for each industry and for each of the three asset-size classes in the industry using the Census X-11 seasonal adjustment method.

Formulas employed in weighting and aggregating company data into industries and industry groups, along with a detailed statement of methodology is contained in the article "The Utilization of Manufacturing Capacity, 1965-73" by Hertzberg, Jacobs, and Trevathan, which appeared in the July, 1974 issue of the Survey of Current Business. This article also contains a detailed comparison of seven published capacity utilization series, from both government and private sources.

Current capacity utilization data are published each quarter in the Survey of Current Business and in a press release.

### 3. Capacity Utilization (Census)

The Census Bureau is currently in the process of developing a series of capacity utilization by SIC. These rates are developed from a special survey from a sub-sample of the Annual Survey of Manufactures. Due to the small size of the sample, rates will be published only at the 2 digit (industry group) SIC level. Although the series initially will be an annual one, the Census Bureau hopes to increase the frequency to a quarterly basis eventually.

#### F. Definitions

The definitions contained in this chapter consist of shortened definitions of working terms used by the Census Bureau in its manufacturing statistics, and in the Input-Output Structure of the U.S. Economy. Their purpose is to give the reader a better indication of the nature of the data contained in a specific publication. Individual publications should be consulted for more detailed definitions of specific terms.

Definitions are also provided in the production, employment, and foreign trade chapters. Certain definitions may be repeated in these chapters as the data discussed therein may overlap.

1. Principal Terms Used in the Census of Manufactures and the Annual Survey of Manufactures
  - a. An establishment is an economic unit, generally at a single physical location where business is conducted or where services or industrial operations are performed. Where distinct and separate economic activities are performed at a single physical location, each activity should be treated as a separate establishment.
  - b. A company is a business organization consisting of one or more establishments under common ownership or control. If a company owns or controls other companies, all establishments of its subsidiaries are included as part of the owning or controlling company.
  - c. Central Administrative Offices and Auxiliary Units are establishments whose employees primarily manage, service, or support the activities of the operating establishments at a physical location separate from that of the establishments.
  - d. All Employees comprises all full-time and part-time employees on the payrolls of operating manufacturing establishments who worked or received pay for any part of the pay period which included the 12th of the month. For the Census of Manufactures this usually is an annual average of every 3rd month.
  - e. Production Workers include working supervisors and all non-supervisory workers engaged in fabricating, processing, maintenance, repair, product development and other services closely associated with these production operations at the establishment covered by the report.
  - f. All Other Employees are the non-production personnel of the manufacturing establishments: executives, office staff, factory supervisors above the working supervisor level, sales, advertising, credit, installation and servicing, purchasing and personnel.
  - g. Payrolls consist of gross earnings paid in the calendar year to all employees on the payroll of operating manufacturing establishments and central administrative offices serving manufacturing establishments.

- h. Production Worker Hours represent all hours worked or paid for at the plant including actual overtime hours (not straight time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.
- i. Expenditures for Plant and Equipment include those made for replacement purposes as well as for additions to plant capacity. Excluded from such expenditure totals are costs of maintenance and repairs charged as current operating expense; new facilities and equipment leased from other non-manufacturing concerns; new facilities owned by the Federal Government but operated under contract by private companies; and plant and equipment furnished to the manufacturer by communities and organizations.
- j. Cost of Materials Consumed is equivalent to the cost of materials, supplies, semi-finished goods, fuels and electric energy actually consumed or put into production during the year, and the cost of products purchased for resale by each manufacturing establishment, whether purchased, withdrawn from inventories, or received from other establishments of the company.
- k. Value of Shipments is comprised of dollar amounts of the received, or receivable net selling values, f.o.b. plant after discounts and allowances, and excluding freight charges and excise taxes. If products are delivered by the establishment, then value is based on the goods' delivered price. Value of shipments includes all items made by or for the establishment from materials owned by it, plus the value of all services performed by employees (such as R&D or repair work).

Value of products bought and resold with no processing is reported separately and included in each industry's total. For multi-unit companies, value of products transferred to other establishments of the same company is tabulated as though each establishment were a separate unit. Value of interplant transfers within the company includes direct costs of production plus a proportion of fixed costs and profit.

(Note: Duplication in Cost of Materials and Value of Shipments).

The aggregate of the cost of materials and value of shipments figures at the 2 and 3 digit industry group level and the "all industries" level includes large amounts of duplication since the products of some

industries are used as materials by others. With some important exceptions such as motor vehicles and parts, this duplication is not significant within the individual 4 digit industries. However, it is significant at the 2 digit and 3 digit industry group levels because these totals often include industries which represent successive stages in the production of a finished manufactured product. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication -- the value of finished manufactures -- tends to approximate two-thirds of the total value of products reported in the census of manufactures.

1. Value Added is the value of shipments plus net change during the year in inventories of finished goods and work in process, minus cost of materials. Value added avoids the duplication in the value of shipments figure which results from the inclusion of the shipments of establishments producing materials and components along with the shipments of establishments producing finished products. It differs from the national income concept of value added in that the latter does not include purchased business services--such cost data are much more readily collected at the company rather than the establishment level. National income originating in manufacturing excludes, in addition to the cost of materials and the purchased business services mentioned above, such other costs as depreciation charges and state and local taxes (other than corporate income taxes).

Value added is considered to be the best value measure now available for comparing the relative economic importance of manufacturing among industries and geographic areas.

- m. The inventories collected by the Census Bureau are the value of beginning-of-year and end-of-year inventories, respectively, held by each manufacturing establishment. Separate inventory figures are displayed for (1) finished products, (2) work in process, and (3) materials, supplies, fuel, and other inventories. Respondents to the Census and Annual Survey were asked to report their inventories at approximate current costs, if feasible, otherwise at book values. Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the value of the inventories aggregated for all establishments in an industry or area is not precise.

- n. An industry concentration ratio is the percentage of an industry's value of shipments accounted for by the four, eight and twenty largest companies.
- o. Specialization Ratio measures the extent to which the industry specializes in making its primary products.
- p. Coverage Ratio measures the extent to which the products primary to an industry are shipped by plants classified in that industry.
- q. For manufacturing industries the County Business Patterns' reporting unit is defined as each manufacturing location of a company, making it the equivalent of the Census establishment. In non-manufacturing industries, however, employers (i.e., separate legal entities) are counted once in each county for each industry in which they operate, regardless of the number of establishments operated. Beginning with the 1974 County Business Patterns (to be published in 1976), the collection and publication of data will be on an establishment rather than a reporting unit basis.

## 2. Geographic Detail Used by the Census Bureau

The Census Bureau, in its Censuses, Annual Survey of Manufactures, and the County Business Patterns, employs six levels of geographic detail: region, division, state, Standard Metropolitan Statistical Area (SMSA), selected cities, and counties.

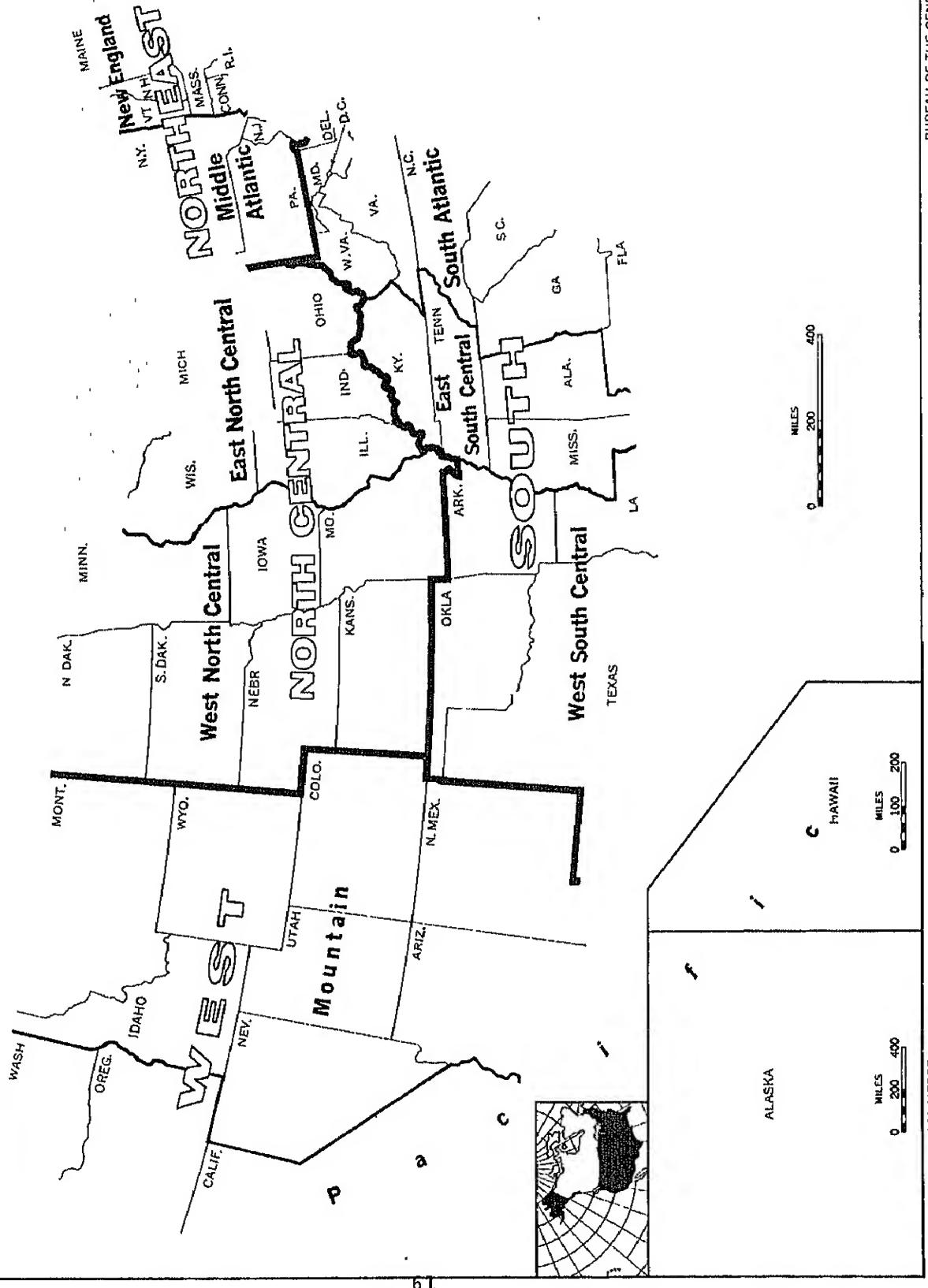
At the state level and below, the degree of published detail depends on the manufacturing employment at that particular level of detail. Thus, in the Census of Manufactures data are only published by SMSA if manufacturing employment for the industry group or industry exceeds 250 employees, or by county and large industrial city, if the manufacturing employment exceeds 450 for the particular industry group or industry. This criteria generally restricts industry detail to a small number of 2 digit industry groups for most states at the county and city level.

The 50 United States and the District of Columbia are grouped into 4 Census regions, and 9 Census divisions listed below:

<u>Region</u>	<u>Division</u>
Northeast	New England Middle Atlantic
South	East South Central South Atlantic West South Central
North Central	East North Central West North Central
West	Mountain Pacific

The map on the following page shows the distribution of states within the individual divisions.

# Regions and Geographic Divisions of the United States



The Standard Metropolitan Statistical Area is a geographic area that considers as a unit the entire population in and around a city, the activities of which form an integrated social and economic system. Except in New England (where a form called a Metropolitan State Economic Area (MSEA) is used), an SMSA is defined as a county or group of contiguous counties which contains at least one central city of 50,000 inhabitants or more. In addition to the county or counties containing such a city or cities, contiguous counties are included in the SMSA if according to certain criteria they are essentially metropolitan in character and sufficiently integrated with the central city. The criteria used to determine an SMSA and a map of all SMSA's is contained in the publication Standard Metropolitan Statistical Area's of the Office of Management and Budget. In addition, the Census Bureau, in each publication, provides a map of the SMSA's covered therein.

### 3. Selected Input-Output Definitions

- a. Valuation of Transactions The valuation underlying the tables in Input-Output are based on producers prices. (Producers' prices have been defined to include Federal and State and local excise taxes collected and paid by the producer.). Such prices exclude distribution costs, which constitute the difference between producers' and purchasers' prices. Under this valuation system, the individual inputs to an industry are valued at producers' prices, and the trade margin and transportation costs associated with the aggregate of these inputs, appear as inputs to the consuming industry from the trade and transportation industries respectively.
- b. Gross Output and Gross Input. Gross output of an industry represents the sum of the value of the following elements: (a) the total production by the industry including both primary and secondary products or services; (b) producers' value of the secondary products or services of other industries which are primary to the given industry; and (c) the domestic port value of substitutable imports, which are distributed as part of the output of the given industry.

Gross input of an industry is equal to the sum of the values of the following elements: (a) total consumption of goods and services required for the industry's total production; (b) value added by the industry; (c) the

producers' value of the secondary products or services of other industries which are primary to the given industry; and (d) the domestic port value of substitutable imports. Thus secondary products and substitutable imports are added to both inputs and outputs. Gross output, the row total, equals gross input, the column total.

c. Inventories: The inventory change shown for each industry represents the change in inventories of the industry's primary products regardless of which industry actually owns or holds the inventories. (This is different from the customary approach to measurement of industry inventories in which the value represents total inventories held by each industry.). Inventories are so classified in the input-output table in order to make the row total equal to the output of each industry.

These and other definitions are explained at length in the BEA publication "Definitions and Conventions of the 1967 Input-Output Study" (published October, 1974).

G. Principal Data Types

1. Annual Survey of Manufactures

Principal Data Type: General Statistics: number of employees, payroll, production workers, man-hours, wages, value added, cost of materials, value of shipments, capital expenditures, end-of-year inventories. Operating ratios calculated from general statistics: (Industry Profiles). Special chapters: manufacturers' inventories, fuels and electric energy used, expenditures for new plant and equipment, book value of fixed assets and rental payments for buildings and equipment, employment and labor costs for operating manufacturing establishments. Industrial detail varies from 2 to 5 digit, with most general statistics provided at the industry (4 digit) level. (Exceptions: product shipments provided at 5 digit level, fuels and electric/3 digit). Annual.

2. Census of Manufactures

Principal Data Type: For the 1972 Census of Manufactures, data are being published in four separate series containing from 7 to 81 individual reports; these series are industry, area, subject, and special reports.

- a. The industry series contains 81 separate reports covering groups of related industries. Each individual report provides general statistics for the four-digit industries in the group covered by the publication including break-outs by region, division and state. It also includes a section on materials consumed by industry and an industry-product analysis section that serves as the basis for input-output analysis performed by BEA. (See "Input-Output Structure of the U.S. Economy").
- b. The area series contain 51 separate reports covering individual states and the District of Columbia. This series provides nine tables for each state, containing the general statistics on a statewide basis at the 4-digit industry level and for total manufacturing. Manufacturing aggregates are also given for SMSA's, counties, and selected cities. Industry group and industry detail is provided at the SMSA, county and city level only if employment within the given industry group or industry exceeds 450 employees and individual establishment operations would not be disclosed through publication of the statistics.
- c. The subject series consists of 9 reports providing detailed statistics for all industries for an individual subject (e.g. size of establishments, employment and labor costs, manufacturers' inventories, expenditures for plant and equipment, selected materials consumed, gross value of depreciable assets and rental payments, selected metalworking operations and industry profiles).
- d. The special reports series consists of 7 reports containing detailed final statistics for a special item: manufacturing activity in government establishments, concentration ratios in manufacturing, type of organization, water use in manufacturing, fuels and electric energy consumed, and textile machinery in place.

3. Current Industrial Reports (Product Series)

Principal Data Type: The Current Industrial Reports (CIR) consists of a series of over 100 reports covering about 5,000 products which represent 40 percent of all U.S. manufacturing. In addition to shipments and production, certain product series contain variously: inventories, stocks, orders, backlog, unfilled orders, capacity,

value added, sales and receipts. Data are shown for industries based on the major 2-digit groupings of the Standard Industrial Classification Code. The series provide data up to the 7 digit SIC product code detail. Monthly to Biennial.

4. Current Industrial Reports (General Reports)

Principal Data Type: Four general reports (covering the entire manufacturing sector) are also published. These are: "Manufacturers' Shipments, Inventories and Orders", "Manufacturers' Export Sales and Orders of Durable Goods", "Survey of the Origin of Exports by Manufacturing Establishments", and "Shipments of Defense-Oriented Industries". The monthly "Manufacturers' Shipments, Inventories, and Orders" provides data on new and unfilled orders, inventories and shipments for certain 2-4 digit SIC categories arranged by durability, market categories, and stage of fabrication. Monthly, Quarterly and Annual.

5. County Business Patterns

Principal Data Type: Employment, number of reporting units, total and by employment size class; and taxable payrolls. U.S. total, state and county, 2-4 digit SIC. The individual state reports present the principal data items by industry (4-digit) level for the state and counties, and by major industry group (2-digit) for Standard Metropolitan Statistical Areas. The U.S. Summary includes data by 4-digit industry for the U.S., by major industry group for each state, and for total manufacturing by county. Annual.

Starting with the 1974 issue (to be published in 1976), the reporting unit will be shifted to the establishment, and payroll data will be reported on an annual as well as a quarterly basis. In addition, coverage will be expanded to include non-manufacturing sectors of the economy. Annual.

6. Input-Output Structure of the U.S. Economy

Principal Data Type: Vol. 1: Distribution to each industry and to final users of the specified industry's output of goods and services - row, (also all industries input to a specified industry column). Vol. 2: Value of inputs to industry named at top of column required from each industry to produce \$1 output. Vol. 3: Industry's requirements, both direct and indirect,

for \$1 of delivery to final demand by industry. 484 sectors on computer tape, 367 sectors published. Quinquennial. Eighty-five sector summary published in the February 1974, Survey of Current Business.

7. Research and Development in Industry

Principal Data Type: Total, federal and company R&D funds; geographic distribution of R&D funds by region, division, and state, R&D funds broken out by cost (i.e., wages, materials and supplies); employment of R&D scientists and engineers; several measures of R&D funds related to employment and net sales; and a breakdown of R&D expenditures for basic research, applied research, and development. 1972 data and certain time series from 1963. Annual.

8. Capacity Utilization in Manufacturing (FRB)

Principal Data Type: Capacity utilization (expressed as a percent) for primary processing, advanced processing and total manufacturing; manufacturing output and capacity index 1967=100. Quarterly estimates and annual data for three latest years. Quarterly release.

9. Capacity Utilization for Materials (FRB)

Principal Data Type: Indexes of output and capacity, and capacity utilization rates (in percents) for the 5 latest quarters. Categories published are materials; durable (metals), and non-durable (textiles, paper and pulp, chemicals and petroleum). Appears in the monthly industrial production release.

10. Capacity Utilization (BEA)

Principal Data Type: Operating rates of capacity utilization and ratios of operating to preferred rates for 12 major industry groups. Press release, and quarterly in the Survey of Current Business.

H. SOURCE SUMMARIES

Agency/Source	Census of Manufactures	Annual Survey of Manufactures	Current Industrial Reports
Frequency of Issue	Census	Census	Census
Publication Started	Quinquennial 1947 <sup>1/</sup>	Annual 1949	Monthly to Annual Varies
Publication from End of Data Period	1-3 years	1-2 years	Monthly, 4-8 weeks Quarterly, 6-12 weeks Annual, 4-10 weeks
Time Period Covered	Current Census year <sup>2/</sup>	Current and prior year	Current and prior period Annual summaries

PUBLICATIONS CAN BE OBTAINED FROM:

Local Government  
Printing Office Bookstore

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

Local Commerce Department  
Field Office

Publications Services  
Bureau of the Census  
Room 1061 - Building #4  
Washington, D.C. 20233

1/ Censuses of manufactures on a selected basis were conducted at 10 year intervals from 1810-1899. Quinquennial 1904-1919, biennial 1921-1939, suspended during World War II.

2/ Some data given for prior Census year also. Time series drawn from Census and ASM given for general summary data (usually back to 1958).

MANUFACTURING CHARACTERISTICS

SOURCE SUMMARIES

	County Business Patterns	Input-Output Structure of the U.S. Economy - 1967
Agency/Source	Commerce/Census	Commerce/Bureau of Economic Analysis
Frequency of Issue	Annual (from 1965)	Quinquennial
Publication Started	1959	1947
Publication from End of Data Period	Varies by State (U.S. Volume 15-18 months)	7 years
Time Period Covered	Current and some instances prior year. Data is for Mid-March or First Quarter.	Year given in publication title only.

PUBLICATIONS CAN BE OBTAINED FROM:

Local Government Printing  
Office Bookstore  
Local Commerce Department  
Field Office

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

SOURCE SUMMARIES

	Research and Development in Industry	Capacity Utilization in Manufacturing
Agency/Source	National Science Foundation (Survey conducted by Census)	Federal Reserve Board (with Census Bureau and McGraw-Hill Economics Department)
Frequency of Issue	Annual	Annual (with Quarterly estimates)
Publication Started	1956	1948
Publication from End of Data Period	12 months preliminary 18 months final	1 month
Time Period Covered	Current year. Certain time series from 1968.	12 quarters, 3 annual figures.
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>		
Office of Publications National Science Foundation Washington, D.C. 20550		
Publications Services Division of Administrative Services Board of Governors of the Federal Reserve System Washington, D.C. 20551		
MANUFACTURING CHARACTERISTICS		

SOURCE SUMMARIES

<p>Capacity Utilization for Major Materials</p>	<p>"Capacity Utilization Series" Survey of Current Business and Quarterly Press Release</p>
<p>Agency/Source</p>	<p>Federal Reserve Board</p>
<p>Frequency of Issue</p>	<p>Annual (with quarterly estimates). Appears monthly in the Industrial Production press release.</p>
<p>Publication Started</p>	<p>1948</p>
<p>Publication from end of Data Period</p>	<p>1 month</p>
<p>Time Period Covered</p>	<p>5 quarters</p>
<p>Commerce/BEA</p>	<p>Series constructed back to 1965 (annual), quarterly from 1967 3 months</p>
<p>9 quarters (July 1974 Survey contains historical series to 1965).</p>	<p><u>PUBLICATIONS CAN BE OBTAINED FROM:</u></p>
<p>Publications Services Division of Administrative Services Board of Governors of the Federal Reserve System Washington, D. C. 20551</p>	<p>Local Government Printing Office Bookstore</p>
<p>Local Commerce Department Field Office</p>	<p>Superintendent of Documents Government Printing Office Washington, D.C. 20402</p>
	<p>MANUFACTURING CHARACTERISTICS</p>

## I. Summaries of Data Types by Publication

The following tables are designed to display the important data types contained in specific publications and to show the geographic and, in most cases, the classification detail they are expressed in.

Throughout the book these tables have the publication title positioned in the central column, the data types arrayed to the left, and the classification detail and reporting units to the right.

The tables for the Census and Annual Survey of Manufactures do not show the level of classification or geographic detail for any specific data type. This information, including detailed information on volume and chapter location can be found in the Census Bureau's Guide to Industrial Statistics. A new edition of the Guide will be released in late 1976. Copies may be obtained from the Publication Office of the Census Bureau in Washington, your local Commerce field office or GPO bookstore, or from the Superintendent of Documents in Washington, D.C.

## SUMMARIES OF DATA TYPES BY PUBLICATION

General Statistics	Data Type	Short Title/Source	Classification/Detail		Reporting Unit
			Selected Special Features	Census of Manufactures (Census)	
1. Establishments - total and with 20+ employees	General Statistics: Provided for geographic divisions, states, SMSA's and selected counties			Numerical List of Manufactured Products (SIC based) Product class and product	Establishment
2. All employees - #, Payroll				Numerical List of Materials Consumed (SIC based)	
3. Production Workers #, man-hours and wages.	Value of product shipments (7 digit Product code)			Census Regions, Divisions, States, SMSA's, large industrial counties and selected cities.	
4. Value added by manufacture	Industry-Product Analysis (shipments by product class and industry)				
5. Cost of materials, fuels, etc.	Materials Consumed by Industry (6 digit material code)				
6. Value of industry shipments.	Water Use in Manufacturing by use, source and treatment				
7. Capital expenditures, new.	Metalworking Operations				
8. End-of-year inventories					

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>General Statistics</u>	Selected Special Features	Annual Survey of Manufactures (Census)	SIC 4-2 digit Numerical List of Manufactured Products (SIC-based) / product class
1. Establishments - total and with 20+ employees	Value of product shipments	Inventories: total, materials, work-in-process and finished products	Census Regions, Divisions, States, SMSA's, large industrial counties and selected cities
2. All employees - #, payroll		Purchased fuels and electric energy	
3. Production workers #, man-hours and wages		Expenditures for new plant and equipment	
4. Value added by manufacture		Depreciable fixed assets and rental payments.	
5. Cost of materials, fuels, etc.		Value of industry shipments	
6. Value of industry shipments		Capital expenditures, new	
7. Capital expenditures, new		End-of-year inventories	

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Employment Payrolls</u>	County Business Patterns Reporting Units	SIC 4-digit, with 3 and 2 digit summaries. Four digit detail by State and county available only in state volumes (U.S. summary provides only 2 digit state totals).	"Reporting Unit"
U.S., State and county	First Quarter	Census Number in each of eight employment size classes, U.S., State and counties	Establishment base to be introduced in 1974 issue.
		Annual Issue	
	Data for Mid-March Reporting Period		
NOTE: Beginning with the 1974 issue, the series is being expanded to include payrolls for the entire year.			
<u>Shipments</u>	<u>Production</u>	<u>Other</u>	7 digit SIC based product code
Quantity/- Value	Quantity	Consumption capacity, stocks, inventories, receipts imports and unfilled orders.	Census Industry Series
Monthly and Quarterly (with annual summaries) also Annual. Data types provided vary with individual reports.			

Data Type	Short title/Source	Classification/Detail	Reporting Unit
Shipments	<u>Inventories</u>	<u>CURRENT INDUSTRIAL REPORTS Summary Reports/Census &amp; BDC</u>	Establishment. Data reported on company basis where establishment data unavailable.
Seasonally adjusted and unadjusted	<u>Orders</u>	"Shipments, Inventories and Orders"	SIC 2-digit industry group
Shipments of Defense oriented industries (to U.S. Government agencies) by geographic division and state, and U.S.		"Shipments of Defense Oriented Industries"	SIC 2-digit industry group
		Annual	
Exports	<u>Exports</u> <u>(Employment)</u>	"Survey of the Origin of Exports by Manufacturing Establishments"	Item
	<u>Estimated and Reported<sup>1/</sup></u>		Establishment
For:			
1. U.S., divisions, and states <sup>2/</sup>		1. SIC 2-digit industry group	
2. Selected SMSAs		2. SIC 2-digit industry group	
3. Congressional districts and selected large industrial counties		3. Total manufacturing only	
4. United States		4. SIC 4-digit industries	
5. Summary data for technology and non-technology intensive industries provided			
		Annual	

<sup>1/</sup> Estimating procedures are described in the introduction to the publications.

<sup>2/</sup> Ratios given by industry group to total shipments and employment

Data Type		Short Title/Source	Classification/Detail	Reporting Unit
<u>Transactions</u>	<u>Direct Requirements</u>	<u>Total Requirements</u>	Input-Output Structure of the U.S. Economy	Input-Output 4 digit (I/O/- SIC concordance provided at front of publication)
Row: 1. Distribution to each industry and to final users of the specified industries output of goods and services.	Column: Value of inputs to industry specified required from each industry (row) to produce \$1 of output.	Column: Industry's requirements, both directly and indirectly for each dollar of delivery to final demand from each industry.	Census - Bureau of Economic Analysis	Establishment

Column:  
2. Industries consumption of raw materials, semi-finished products and services and value added.

Quinquennial

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>R &amp; D Expenditures</u>	<u>R &amp; D scientists &amp; engineers</u>	R&D in Industry	2-3 digit SIC Company
1. Total, Federal, and company by industry and company size group. 2. Geographic distribution (total) 3. By type of cost 4. Per employee, R&D scientist and engineer, net sales 5. For basic research applied research, and development	Number, and man-years by industry and company size and group.	National Science Foundation	

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Indexes of Output and Capacity Utilization (percent)</u>	Capacity Utilization for Materials	Materials Durable - Metals Nondurable - Textiles	Company
	FRB	Paper & Pulp Chemicals and Petroleum	
<u>Capacity Utilization Rates (Percent)</u>	Capacity Utilization Series	Energy Materials	
	BEA-Survey of Current Business	12 major industry groups, summarized to durables and non-durables, primary and advanced processing and total.	
	-Quarterly beginning with March issue- Operating rates (percent of capacity) and ratios of operating to preferred rates for 8 quarters. Seasonally adjusted.	Data also given for 3 asset-size classes for total manufacturing, durables and non-durables.	
	-Quarterly beginning with March issue- Operating rates (percent of capacity) and ratios of operating to preferred rates for 8 quarters. Seasonally adjusted.	Data also given for 3 asset-size classes for total manufacturing, durables and non-durables.	
	NOTE: July 1974 Survey contains historical series back to 1965.		MANUFACTURING CHARACTERISTICS

J. Chapter Contents of the Census of Manufactures

Summary and Subject Statistics and Special Reports  
(13 separate reports)

1. General Summary Tables
2. Employment and Labor Cost
3. Manufacturers' Inventories
4. Expenditures for Plant and Equipment
5. Selected Materials Consumed
6. Gross Value of Assets and Rental Payments
7. Selected Metalworking Operations
8. Manufacturing Activity in Government Establishments
9. Concentration Ratios in Manufacturing
10. Type of Organization
11. Water Use in Manufacturing
12. Fuels and Electric Energy Consumed
13. Textile Machinery in Place

Industry Statistics (81 reports covering related groups of industries)

Table

- 1a. General Statistics
- 1b. Selected Operating Ratios
- 2. General Statistics by Geographic Areas (Division, Region and State)
- 3. Detailed Statistics (4 digit)
- 4. General Statistics by Employment Size of Establishment
- 5a. General Statistics for Establishments by Industry and Primary Product Class Specialization: 1967
- 5b. Industry Product Analysis: Industry and Primary Product Shipments, Specialization Ratios and Coverage Ratios.
- 5c. Industry Product Analysis: Shipment by Product Class and Industry.
- 6a. Products and Product Classes--Quantity and Value of Shipments by All Producers.
- 6b. Product Classes--Value shipped by all manufacturing establishments by Geographic Area.
- 6c. Product Classes--Quantity and Value Shipped by all manufacturing establishments.
- 7a. Materials Consumed by Kind
- 7b. Fuels and Electric Energy (6 digit) Consumed by 4 digit industries.

Contents of the Census of Manufactures (cont'd.)

Area Statistics (50 states and the District of Columbia)

Table

1. Manufacturing Employment Statistics for the State and SMSAs.
2. General and Comparative Statistics for the State and Selected SMSAs.
3. Detailed Statistics
4. General Statistics for SMSAs, Counties and Selected Cities 1/
5. General Statistics by Industry Group and Industry.
6. General Statistics by Industry for SMSAs.
7. General Statistics by Industry Group for Selected Counties. 2/
8. General Statistics by Industry Group for Selected Cities. 2/
9. Distribution of Establishments by Employment Size Class and Major Industry Group for Counties.

1/ Only cities with 450+ employees displayed.

2/ Industry group detail is only shown when it contains 450+ employees or more for that given geographic area and it will not disclose data for individual companies.

K. Chapter Contents of the Annual Survey of Manufactures

1. Summary Statistics
2. General Statistics for Industry Groups and Industries
3. Value of Product Shipments
4. Value of Manufacturers' Inventories
5. Fuels and Electric Energy Used by Industry Groups
6. Expenditures for New Plant and New Equipment
7. Book Value of Fixed Assets and Rental Payments for Buildings and Equipment
8. Employment and Labor Costs for Operating Manufacturing Establishments
9. Statistics for States, Standard Metropolitan Statistical Areas, and Large Industrial Counties
10. Industry Profiles

I. LIST OF CURRENT INDUSTRIAL REPORTS

Series number	Title
<b>ALL MANUFACTURING INDUSTRIES</b>	
MQ-1	Manufacturers' Inventory and Sales Expectations
M3-1	Manufacturers' Shipments, Inventories, and Orders of Durable Goods
MA-4	Manufacturers' Export Sales and Orders
MA-161	Survey of the Origin of Exports of Manufacturing Establishments (Issued every 3 years)
MA-375	Shipments of Defense-Oriented Industries
<b>PROCESSED FOODS</b>	
M20A	Flour Milling Products
M20C	Confectionery, Including Chocolate Products
M20J	Fats and Oils - Oiled Crustings
M20K	Fats and Oils - Oiled Crustings, Consumption, and Stocks
MA-20F	Salad Dressing, Mayonnaise, and Related Products
<b>TEXTILE MILL PRODUCTS</b>	
M22A	Woven Fabrics Production, Inventories, and Unfilled Orders (Weavers, Finishers, and Piece Goods Dealers)
M22D	Consumption on the Woolen and Worsted Systems
MA-22F, 1	Stocks of Wool and Related Fibers
MA-22F, 2	Textured Yarn Production
MA-22G	Spun Yarn Production
MA-22H	Narrow Fabrics
MQ-22K	Nonwoven Fabrics
MA-22S	Knit Fabric Production
M22P	Cotton, Manmade Fiber Staple, and Linters
MQ-22T, 2	Carpet and Rugs
MA-22S	Broadwoven Fabrics Finished
MQ-22T, 1	Conton Broadwoven Gray Goods
MQ-22T, 2	Manmade Fiber Broadwoven Gray Goods
MQ-22T, 3	Wool Broadwoven Goods
MQ-22T, 4	Tire Cord and Cord Fabrics
<b>APPAREL AND LEATHER</b>	
MA-23A	Apparel
M23H	Women's, Men's, and Juniors' Apparel
M23B	Men's Apparel
M23D	Gloves and Mittens
MA-23J	Brassieres, Girdles, and Other Garments
MA-23K	Sheets, Pillowscases, and Towels
M23L	Shoes and Slippers
MA-31A	Shoes and Slippers - By Type of Construction and Price Line
<b>LUMBER, FURNITURE, AND PAPER PRODUCTS</b>	
MA-24F	Hardwood Plywood
MA-25H	Softwood Plywood
MA-24L	Particleboard
MA-24T	Lumber Production and Mill Stocks
MA-25E	Mattresses, Bedsprings, and Sleep Furniture
MA-25H	Office Furniture
M22A	Pulp, Paper, and Board
MQ-26F	Converted Flexible Packaging Products
<b>CHEMICALS, RUBBER, AND PLASTICS</b>	
M28A	Inorganic Chemicals
MA-34C	Inorganic Fertilizer Materials and Related Acids
M28B	Industrial Gases
MA-34E	Paint, Varnish, and Lacquer
MA-34F	Pharmaceutical Preparations, Except Biologicals
MA-28G	Asphalt and Tar Roofing and Siding Products
MA-29A	Sales of Lubricating and Industrial Oils and Greases
MA-29C	Rubber, Supply and Distribution
MA-30A	Rubber for the U.S.
MA-29A	Office, Computing, and Accounting Machines
MA-30B	Rubber and Plastics Hose and Belting
MA-30D	Shipments of Selected Plastics Products
M20E	Plastics Bottles
MA-35F	Manning Machinery and Equipment
<b>STONE, CLAY, AND GLASS PRODUCTS</b>	
MQ-32A	Flat Glass
MQ-32C	Refractories
M22D	Clay Construction Products
MA-32E	Consumer, Scientific, Technical, and Industrial Glassware
M22G	Glass Containers
MA-32J	Fibrous Glass
<b>PRIMARY METALS</b>	
M23A	Iron and Steel Castings
MA-33B	Steel Mill Products
M23-3	Inventories of Steel Mill Shapes
M23E	Nonferrous Castings
MA-33G	Magnesium Mill Products
M23K	Inventories of Brass and Copper Wire
MA-33L	Insulated Wire and Cable
M23-2	Aluminum Ingot and Mill Products
MA-33G	Copper-Base Mill and Foundry Products
BDGF-84	Foundry Products
BDGF-263	Titanium Ingot, Mill Products, and Castings
<b>INTERMEDIATE METAL PRODUCTS</b>	
MA-34C	Commercial Steel Forgings
M22D	Metal Cans
MQ-34E	Plumbing Fixtures
MA-34G	Steel Power Bolts
M24H	Closures for Containers
MA-34K	Steel Shipping Drums and Pails
MA-34N	Selected Heating Equipment
MA-34P	Aluminum For Converted Aircraft and Aircraft Engines
MA-35L	Truck Trailers
MQ-37D	Backlog of Orders for Aerospace Companies
MA-37E	Aircraft Propellers
M27G	Complete Aircraft and Aircraft Engines
MA-38H	Selected Atomic Energy Products
MA-38L	Selected Instruments and Related Products
MA-38B	Construction Machinery
MA-35A	Farm Machines and Equipment
MA-34R	Office, Computing, and Accounting Machines
MA-35D	Construction Machinery (Include MA-35D)
MA-35F	Manning Machinery and Equipment

Series number	Title
<b>MACHINERY AND EQUIPMENT (Continued)</b>	
MA-35J	Selected Industrial Air Pollution Control Equipment
MA-35L	Internal Combustion Engines
MA-35M	Air Conditioning and Refrigeration Equipment
MA-35P	Pumps and Compressors
MA-35S	Tractors, Except Garden Tractors
MA-35U	Vending Machines (Coin Operated)
MQ-35W	Metalworking Machinery
DI-550P	Diamond Dies
<b>SWITCHGEAR, SWITCHBOARD APPARATUS, RELAYS, AND INDUSTRIAL CONTROLS</b>	
MA-36A	Switchgear, Switchboard Apparatus, Relays, and Industrial Controls
MQ-36B	Electric Lamps (including MS6D)
MQ-36C	Fluorescent Lamps, Ballasts
MA-36E	Electric Housewires and Fans
MA-36F	Major Household Appliances
MA-36H	Motors and Generators
MA-36K	Wiring Devices and Supplies
MA-36L	Electric Lighting Fixtures
MA-36M	Radio Receivers and Television Sets, Phonographs and Record Players, Speakers and Related Equipment
MA-36N	Selected Electronic and Associated Products
MA-36P	Selected Electronic and Associated Products
MA-37D	Backlog of Orders for Aerospace Companies
MA-37E	Aircraft Propellers
M27G	Complete Aircraft and Aircraft Engines
MA-37L	Truck Trailers
MA-38B	Selected Instruments and Related Products
MA-38H	Construction Machinery
MA-38L	Office, Computing, and Accounting Machines
MA-38R	Construction Machinery (Include MA-35D)
BDGF-88	Anti-Friction Bearings, Manufacturers' Production, Shipments, and Unfilled Orders

Note: The number of Current Industrial Reports issued varies periodically. Check with Census Bureau publications office for the latest inventory of available reports.



## V. PRODUCTION

### A. Introduction

The Bureau of the Census publishes principal sources of data on production or output. They are the shipments and production data from the Census and Annual Survey of Manufactures and from the Current Industrial Reports.

These sources are used to varying degrees in the compilation of the three indexes of production discussed in this chapter: the Census of Manufactures Indexes of Production (published quinquennially), the Federal Reserve Board's Indexes of Production, and the Department of Labor's series, Productivity Indexes for Selected Industries. The Commerce Department's Bureau of Economic Analysis also compiles a series entitled "Gross Product Originating" by industry which is a component of the GNP. Because this series pertains to national income accounts, which are not covered in this publication, it is not described here. Inquiries regarding it can be addressed to the Bureau of Economic Analysis, U.S. Department of Commerce.

The Census Bureau's Indexes of Production appears following the release of the quinquennial Manufactures and Minerals Censuses. It provides data at the industry (4-digit SIC) level, and deflators at the product class level. The index is published only for Census years and is not interpolated to provide an annual time series.

The Federal Reserve Board's Indexes of Production are compiled monthly, averaged to provide quarterly figures, and adjusted to an annual basis. The indexes are reviewed on a continuing basis, and are benchmarked to the Census data when a general revision of the index is conducted. The monthly series are based on product, kilowatt-hour and man-hour data, and are published in groupings equivalent to combinations of 3-4 digit SIC industries.

The Department of Labor derives its indexes of output per man-hour from its two respective indexes (on output and man-hours). The indexes are published quarterly for total manufacturing and annually at selected 2, 3 and 4 digit SIC levels. The methodology and index formulas used in the output and man-hour indexes are published in the BLS Handbook of Methods, (Bulletin 1711) available from the Government Printing Office.

The Current Industrial Reports provide the most current, detailed data available on shipments and production. The sources of the data contained in the Current Industrial Reports and the methods of collecting it are described briefly on the covers of the individual industry reports and as an appendix to the general reports.

B. Indexes of Production (Census)

The Census indexes of production are compiled by developing detailed deflators and weights for the value of output of all manufacturing and mining industries.

Industry measures are compiled with weights derived in two consecutive Census years and also with an average of both years (cross weights). In addition to value added weighted indexes, cross-weighted indexes of production have been compiled with special-purpose weights: value of shipments, total employment, total payroll, production worker man-hours and electric energy used. Unit value indexes are also compiled: value of shipments per unit shipped and value added per unit of output.

**Methodology:** The basic procedures followed in adjusting detailed Census data and compiling the indexes of production are outlined below:

Product price deflators (1972/1967) are selected on the basis of their rating in a test which compares Census-derived unit value relationships to wholesale price indexes (criteria include original source of price data, whether "transactions" or "list price", the product mix represented by the deflator, etc.). Unpriced products, i.e., those with no quantity data and/or no equivalent wholesale price representation, are imputed from the priced products within their product class grouping (5-digit code). Independently derived price series also may be used to supplement the wholesale price and unit value data.

Detailed value of shipments data drawn from the 1972 and 1967 Censuses serve as the foundation

of the series; they are adjusted to provide data conceptually equivalent to value of production. Value of beginning and end of year inventories are revalued to the average price level for the year using WPI deflators, and inventory change for each year is calculated to provide an inventory adjustment factor. These value of production data are then deflated to constant dollar terms using the price deflators discussed above. This deflation procedure is applied within the industry at the product class (5-digit) level in order to reflect the degree of specialization of the industry, and to account for the secondary as well as primary products of the industry.

These data are then used to calculate gross value production indexes. Value added to value of shipments ratio weights<sup>1/</sup> are applied to correct for the double counting that occurs when one material passes through several industries and processes within the manufacturing sector.

Special purpose indexes are also compiled using shipments, labor, and energy consumption weights.

Further discussion of the methodology and a list of the formulas employed in constructing the indexes appears in the introduction to the 1972 Censuses of Manufacturing and Mineral Industries: Indexes of Production (MC-72 (S)-6).

c. Indexes of Production (published by the Federal Reserve Board)

The Federal Reserve Board's Industrial Production indexes are published on a monthly basis. These monthly indexes are provided for both the industry and market structures on a seasonally adjusted and unadjusted basis. Quarterly and annual figures represent averages of the monthly data.

<sup>1/</sup> For industries whose product classes display substantial variability in their value added to value of shipments ratios, 5-digit weighted indexes were developed. In the remainder, weighting procedures are applied at the 4-digit industry level.

The industry structure is composed of 235 SIC-based series and includes mining and utilities as well as the total manufacturing sector. The market structure is a regrouping of these 235 series representing various levels of aggregation. The market grouping of production data--showing consumer goods, equipment, and materials separately--was developed in 17. Its purpose was to provide links among changes in final demands, industrial activity and prices, and to enable the evaluation of the economic impact of wartime industrial mobilization. The published seasonally adjusted total index is based on the combination of 40 of the seasonally adjusted major components of the market structure.

The Federal Reserve Board has developed an annual index program with data beginning in 1954. The annual FRB indexes provide information useful in monitoring the annual levels of the published monthly indexes and in modifying their "correction factors", pending availability of the more comprehensive benchmarks. The production series are benchmarked to detailed Census production data when a general revision of the index is conducted.

The procedures and the formulas used in the compilation of the Federal Reserve Board's Indexes of Production are discussed in detail in their production Industrial Production. A new edition of this book will be issued late in 1976.

Substantial revisions to the Industrial Production Index, particularly series revisions, were made in 1971, and further revisions were made in 1976. The 1971 revisions, described in the FRB's publication, Industrial Production, 1971 Edition have been carried back in detail to January, 1954.

The 1976 revision furnishes more detailed and comprehensive information for industries producing motor vehicles, chemicals, and construction products; for oil and gas extraction and refining, and for electric and gas utility operations. Additional measures of energy production by stage of processing have been developed to provide new U.S. summary measures, which account for about one-eighth of total industrial production.

17 Intermediate products were added later.

Table 1. Components of the Federal Reserve Board's  
Indexes of Industrial Production

Market Structure	Industry Structure
Industrial Production, total (100.0)*	Industrial Production, total (100.0)*
Products, total (62.2)	Mining (6.4)
Final products (48.9)	Utilities (5.1)
Consumer goods (28.5)	Manufacturing, total (88.6)
Durable (7.9)	e.g. Apparel products (3.3)
Automotive products (2.8)	Paper and products (3.2)
Home goods (5.0)	Printing and publishing (4.7)
Nondurable (20.7)	Chemicals and products (7.9)
Clothing (4.3)	Primary Metals (6.6)
Consumer staples (16.3)	Fabricated metal products (5.9)
Equipment (20.4)	Nonelectrical machinery (9.2)
Business (12.7)	Electrical machinery (8.2)
Defense and space (7.7)	Transportation equipment (9.3)
Intermediate products (13.3)	
Materials, total (37.8)	
Durable goods materials (20.8)	
Nondurable goods materials (14.0)	
Fuel and power, industrial (2.9)	

\* Numbers in parentheses are present share of total value added in 1967.

Note: These shares were calculated prior to the 1976 revision.

All of the individual component series have been adjusted, where necessary, to the Censuses of Manufactures and Minerals benchmark data for changes from 1963 to 1967 and to comprehensive annual data from a variety of other sources through 1973.

The 1967 comparison base (1967=100) has been retained for the new index, and 1967 value-added weights continue to be used for the compilation beginning in 1967. The revised gross-value series for Industrial Production products are based on 1972 dollar weights instead of the previously used 1963 dollars.

D. Output Indexes - Manufacturing Sector and Selected Industries (BLS)

Output-per-hour indexes are computed by dividing an output index by an hours index. The output-per-hour estimates developed by the Bureau of Labor Statistics for the manufacturing sector are based on hours indexes derived from BLS surveys of establishments, payrolls, and output indexes derived from GNP data prepared by the Bureau of Economic Analysis, U.S. Department of Commerce.

BLS output indexes for selected manufacturing industries are based primarily on the physical output of the products of the industry combined with fixed period weights. They are prepared from basic data published by the Census Bureau as well as by private agencies such as trade associations. Unit employee-hour weights are used, whenever possible, to aggregate the various products of a single industry. However, for most industries, unit value weights, which are assumed to be proportional to unit employee-hour weights, are used as substitutes. Weights are developed either from special surveys or from Census data.

Industry output indexes are benchmarked to Census years. For intercensal years, annual indexes are based on either physical output data or, if such data are not available, value of output adjusted for price change. The annual series are subsequently adjusted to the benchmark levels for the census years.

A limitation of the indexes is that they do not take into account changes in the quality of goods and services produced. In addition, changes in the degree of plant

integration and specialization often are not reflected adequately in the production statistics.

E. Current Industrial Reports (Census)

1. Industry Series: Reports are usually issued under a 3 or 4 digit SIC category. (The 100 reports published in the series are listed at the rear of this chapter). The coverage and data adjustments made vary from industry to industry, and are described on the cover of the individual report.

The CIR report for "Aluminum Ingot and Mill Products", for example, explains that data for January, 1975 were tabulated from reports from 81 ingot producers and importers, and 206 producers of aluminum mill products. Producers shipping less than 10,000 pounds per month of the aluminum products listed are not included. Data gaps stemming from non-response are imputed. Adjustments are also made for differences in reporting periods. Prior data are revised on the receipt of corrected data and late reports from respondents.

2. Manufacturers' Shipments, Inventories, and Orders: This survey provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufacturers. The monthly survey, M3-1, does not provide information at the complete SIC industry detail shown in the ASM because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies file separate divisional type reports for their operations in different industries.

F. Definitions

1. Census

- a. Value of Shipments - Dollar amounts of the received, or receivable net selling values, f.o.b. plant after discounts and allowances, and excluding freight charges and excise taxes. If products are delivered by the establishments, then value is based on the goods' delivered price. Value of shipments includes all items made by or for the establishment from materials owned by it, plus the value of all services performed by employees (such as R&D or repair work).

Value of products bought and resold with no processing is reported separately and included in each industry's total. For multi-unit companies, value of products transferred to other establishments of the same company is tabulated as though each establishment were a separate unit. Value of interplant transfers within the company include direct costs of production plus a proportion of fixed costs and profit.

The value of shipments figures developed from the ASM contain duplication at the all-manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. The duplication is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

- b. Gross Product: The contribution of each industry to gross national product in market prices net of purchased material and service inputs.
- c. Value of Production: Value of shipments net of inventory change over the period.

2. Federal Reserve Board

- a. Value of Output: Value added plus cost of materials consumed.
- b. Gross Value: Gross value measures represent the constant-dollar amounts of all final and intermediate products made at industrial establishments. The figures include inventory adjustments and have been adjusted to include Federal excise taxes paid by industrial producers but not local sales taxes. They do not include wholesale and retail distribution mark-ups--except for the fluid milk and residential and commercial utility series. They include output for export, but not imports, of final products which are included in estimates of final expenditures. In each case the gross value measures include the value of manufactured materials, the value of farm products and the value of imported materials incorporated in the industrial products, in addition to the value-added output of industry. They are without duplication since only one stage of output is represented.

c. Value Added is calculated by subtracting from each industry's gross value of products the costs of materials, supplies, containers, fuels, purchased electrical energy, and contract work, but not the cost of purchased business services. The data for the manufacturing and the mineral industries are taken mainly from their comprehensive Censuses. Comparable data for the utility industries are drawn from reports of the Federal Power Commission and from trade sources.

G. Principal Data Types

1. Indexes of Production (Census)

Principal Data Type: Indexes of production by 4 digit SIC, cross weighted for the following weights: value added, value of shipments, total employment, total payroll, production worker hours, and electric energy used. Indexes of output are also provided with the following measures used: employees, production worker hours, kilowatt-hours used, and payroll per unit of output. Unit value indexes are shown for shipments and value added. The publication also provides the deflators and the data used to calculate the weights. Quinquennial

2. Industrial Production (FRB)

Principal Data Type: Indexes of industrial production, both market and industry groupings, seasonally adjusted and unadjusted, most time series from 1947 and 1954 (1967=100) (3-4 digit FRB classification for individual industry series). Gross value of products seasonally adjusted for products in the market structure, in constant dollars. Monthly and annual averages. Monthly, (press release). Historical summary, occasional.

3. Productivity and Costs in the Private Economy (BLS)

Principal Data Type: Indexes of output for total manufacturing quarterly for current and previous year. Percent change in output from previous quarter and same quarter previous year. Annual percent change in output from previous year. Quarterly.

4. Productivity Indexes for Selected Industries (BLS)

Principal Data Type: Indexes of output, hours, and employment (for employees, production workers and non-production workers); and indexes of output per employee-hour and output per employee for the same three categories. All data for 3 and 4-digit SIC; indexes from 1947. Annual

5. Annual Survey of Manufactures

Principal Data Type: Value of industry shipments: 4-digit for U.S. and 2-4 digit by geographic region and state (detail depending on degree of industry structure and disclosure problems). Value of product shipments for U.S. by 5-digit product code. Annual.

6. Census of Manufactures

Principal Data Type: Value of primary and secondary product shipments by 4-digit industry group. Product shipments by industry. Value of 5-digit product produced by different 4-digit industry groups (sometimes given as a value range). Production (quantity), and quantity and value of shipments (including interplant transfers) by 7-digit SIC-based product, and industry aggregates. Value of shipments by product class by geographic region, division and state. Quinquennial.

7. Current Industrial Reports

Principal Data Type: Shipments (production in some cases), quantity and/or value; data on inventories and orders provided in some series. Over 100 published reports following SIC groupings provide 7-digit SIC-based product detail covering 40 percent of all U.S. manufacturing. The degree of coverage of the industry reported is described at the front of the report. Publication varies from monthly to biennial depending on the industry group covered. All monthly and quarterly series include annual summaries. A monthly, summary CIR is entitled "Manufacturer's Shipments, Inventories and Orders." It provides data on new and unfilled orders, inventories and shipments for certain 2-4 digit SIC categories arranged by durability, market categories and stage of fabrication.

## H. SOURCE SUMMARIES

Agency/Source	Census of Manufactures*	Annual Survey of Manufactures	Current Industrial Reports
Frequency of Issue	Census Quinquennial	Census Annual	Census Monthly to Annual
Publication Started	1947 <sup>1/</sup>	1949	Varies
Publication From End of Data Period	1 1/2-3 years	1-2 years	Monthly, 4-8 weeks Quarterly, 6-12 weeks Annual, 4-10 months
Time Period Covered	Current Census year	Current and prior year	Current and prior period. Annual summaries

### PUBLICATIONS CAN BE OBTAINED FROM:

Local Government Printing  
Office Bookstore

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

Local Commerce Department  
Field Office

Publications Services  
Bureau of the Census  
Room 1061 - Building #4  
Washington, D.C. 20233

<sup>1/</sup> Censuses of manufactures on a selected basis were conducted at 10 year intervals from 1810-1899. Quinquennial 1904-1919, biennial 1921-1939. Suspended during World War II.  
\* Indexes of Production is published as a special report in the Census of Manufactures. In this chapter it is discussed separately from the regular Census data on shipments. Publication title, #MC67(S)-6, Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Some data given for prior Census year also. Time series drawn from Census and ASM given for general summary data (usually back to 1958).

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SOURCE SUMMARIES

<p>Productivity Indexes for Selected Industries</p>		<p>Productivity and Costs in the Private Economy</p>	
Agency/Source	Labor/BLS	Agency/Source	Labor/BLS
Frequency of Issue	Annual	Frequency of Issue	Quarterly
Publication Started	Indexes from 1947	Publication Started	1970
Publication from End of Data Period	9 months	Publication from End of Data Period	1 month
Time Period Covered	Annual Basis. Time series as stated above.	Time Period Covered	Up to 8 quarters. Annual rates for current and previous years.
		<p><u>PUBLICATIONS CAN BE OBTAINED FROM:</u></p>	
		<p>The Bureau of Labor Statistics Regional Offices, a list of which is provided in the Introduction of this volume.</p>	
		<p>Superintendent of Documents Government Printing Office Washington, D.C. 20402</p>	
		<p>PRODUCTION</p>	

SOURCE SUMMARIES

Industrial Production Indexes	
Agency/Source	Federal Reserve Board
Frequency of Issue	Monthly, (press release); Historical summary (occasional).
Publication Started	1919
Publication from End of Data Period	11 months
Time Period Covered	Monthly, year to date, past 6 months prior year, prior year average.
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>	
Publications Services Division of Administrative Services Board of Governors of the Federal System Washington, D.C. 20551	
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I. SUMMARIES OF DATA TYPES BY PUBLICATION

Data Type	Indexes of Output <sup>2/</sup>	Short Title/Source	Classification/Detail	Reporting Unit
<u>Indexes of Production</u> (Cross Weights)		Census of Manufactures	4 digit SIC	Establishment
1. Value added <sup>1/</sup>	1. Per employee (total employee weights)	Indexes of Production		
2. Value of shipments	2. Per production worker-man-hour (man-hour weights)			
3. Total employment	3. Per kilowatt-hour (Electric energy weights)			
4. Total payroll	4. Payroll per unit of output			
5. Production worker man-hours				
6. Electric energy used.				

Deflators for 1963, and 1967 weights and Cross-weights by product.

5 digit SIC-based product classification

1/ 1967 and 1963 weights are provided.

2/ Value added weights also provided for each measure.

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Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Shipments</u> Value: current and two prior years.	<u>Geographic</u> Region, division and state (4 digit only)	Annual Survey of Manufactures  ANNUAL  <u>Shipments:</u> Value <u>Industry</u> (4) : Primary products Secondary products <u>Product</u> (5) : By Industry (4) Product shipments (5) by geographic region, division and state  Value of shipments (2-4) by state, SMSA, counties, and selected cities. <u>Quantity</u> and value of shipments (7)	Establishment  Establishment  Census of Manufactures  (Number in parentheses after data type indicates highest level of detail available.)  PRODUCTION

Data Type			Short Title/Source	Classification/Detail	Reporting Unit
<u>Shipments</u>	<u>Production</u>	<u>Other</u>	Current Industrial Reports Census Industrial Series	7 digit SIC product code	Company or establishment
Quantity/- Value	Quantity	Consumption capacity city, stocks, inventories, receipts, imports and unfilled orders.	Monthly and Quarterly (with annual summaries) also Annual. Data types provided vary with individual reports.	2 and selected 4 digit SIC industry groups and industries	PRODUCTION

Data Type	Short Title/Source	Classification/Detail
<u>Indexes of Production 1967=100</u> Major and Supplementary Market Groupings	Major Industry groupings, sub-totals and individual series  Seasonally Adjusted and Unadjusted Monthly and Annual Average  (Quarterly, seasonally adjusted, for major market groupings and industry divisions).	Industrial Production Federal Reserve Board (Monthly press release)  FRB 2-3 digit (some combinations of 3 digit groups). Selected 4 digit

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
1. Indexes of Total Output 2. Average annual rate of change from beginning of series to current year Annual. Time Series beginning in 1947 for most industries	Productivity Indexes for Selected Industries BLS*	SIC 3 and selected 4 digit. Some combinations of SIC groups.	Establishment
1. Quarterly indexes for current and previous year. 2. Percent change from previous quarter and same quarter previous year. (Maximum 8 quarters) 3. Annual percent change from previous year. Quarterly Seasonally Adjusted	Output-Total Manufacturing Productivity and Costs in the Private Economy BLS (with data from Commerce/BEA and the Federal Reserve Board)	Total Manufacturing	Establishment
NOTE: See also chapter on employment. *Output indexes are frequently constructed on Census data supplemented by trade association data.			PRODUCTION

J. Index Analysis Tables

Table 2. CENSUS - INDEXES OF PRODUCTION

Title	Source	Weights/Procedures
<u>Census of Manufactures and Minerals</u>	Data drawn from series published in the Censuses. Deflators are drawn from the BLS (WPI) in addition to Census unit values.	<ol style="list-style-type: none"><li>1. Coverage adjustment</li><li>2. Specialization adjustment</li><li>3. Application of price deflators</li><li>4. Inventories subtracted from shipments data if production data not used.</li><li>5. Value added weights applied. Special purpose indexes also are compiled using shipments, labor and energy consumption weights.</li><li>6. Marshall-Edgeworth formula used in compilation of index.</li></ol>
<u>Indexes of Production</u>		
472 Manufacturing and mining industries		
168 Minor industry groupings		
26 Major industry groupings		

Table 3. FEDERAL RESERVE BOARD INDEXES OF PRODUCTION

Title	Source	Weights/Procedures
<u>Monthly/Industry Structure</u> (235 Series) <sup>1/</sup>	137 Physical product-type series - Census, Agriculture, ABC, Tariff Commission and Trade Associations 55 Electrical power series (12 of which combined with man-hour series). Reports from utilities and plants to FRB, plus FPC data. 35 Man-hours series. BLS Production worker man-hours.	<p>Value Added: Monthly production series adjusted to benchmark levels derived from Census of Manufactures. Quantities and value series for 6,000 products combined to provide weighted average changes for 5 digit product classes and 4-2 digit industry groups and industries for time periods covered.</p> <p>If only value data were available, deflators (average value per unit shipped or BLS price indexes) were applied.</p> <p>Adjustments: For variations in reporting periods, seasonal adjustments, and for irregular movements such as sporadic changes in factory inventories.</p>
<u>Monthly/Market Structure</u>	Census of Manufactures, FPC, IRS, and trade associations: 73 consumer goods series 33 equipment series 30 intermediate products series 91 materials series	<p>Value added weights for 1967 used to calculate monthly index.</p> <p>Gross value of products used to calculate constant dollar series (1972 \$). Gross value adjusted to include inventory changes and Federal excise taxes.</p>
<u>ASM Production Indexes (annual)</u> Developed by FRB Begun in 1963; series constructed back to 1954. <sup>104</sup>	Industry data on value of output, deflated usually with BLS WPI at 4 digit level with price indexes chosen by BEA.	<ol style="list-style-type: none"> <li>1. Monitoring annual levels of published monthly indexes</li> <li>2. Modifying "correction factors" for annual levels pending availability of new benchmark.</li> </ol>
<u>FRB Adjustments</u>	<u>Source of Adjustment Factor</u>	<u>Procedure (for annual adjustments)</u>
Historical	Benchmark years - comprehensive Census data Annual levels - production: Primarily from monthly series. KWH - man-Hours: primarily from ASM indexes.	<ol style="list-style-type: none"> <li>1. New annual index levels (comparable to monthly series) compared with related economic measures for consistency.</li> <li>2. Correction factors calculated: ratios of annual indexes (adjusted to benchmarks) to the annual averages of the monthly indicators, (usually at the 4 digit SIC level).</li> <li>3. Individual monthly series adjusted to annual or benchmark levels.</li> </ol>
Extrapolations beyond latest benchmark	To annual levels of current monthly series or by adjusting to ASM indexes.	<p><sup>4</sup>. Where ASM or price data judged not sufficiently reliable, ratios of manufacturing activity (e.g., production per man-hour and KWH and payrolls per unit of production) were used for review and editing.</p>

<sup>1/</sup> The series was expanded from 227 in the 1976 revision.  
The eight new series are not displayed here.

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Table 4. LABOR OUTPUT INDEXES

Title	Index of Output	Index of Employee Hours <sup>1/</sup>	WEIGHTS		PROCEDURE
			Output 2/	Output	
Productivity Indexes for Selected Industries	1. Benchmark indexes (Census)	Industry employment and employee hours indexes (BLS or Census)	1. Unit man-hour weights. (special surveys or Census of Manufactures).		Benchmark Indexes: Price indexes for each primary product class are developed by individual product whether made in the industry or elsewhere.
	2. Product price indexes:		or		
	a. WPI	2. Unit value weights <sup>3/</sup> (special surveys or Census of Manufactures).			
	b. Quantity and value data from Census Constant dollars (Unit employee hours weights)	(Employee hours indexes are published for all employees, non-production workers. Data for the first two are unavailable on an annual basis and are therefore estimated.)			These price indexes are combined with employee hour weights to derive the total primary product output index which is then multiplied by a "coverage" adjustment to reflect the total output of the industry.
	3. Annual indexes				
	a. Physical output data (aggregated)				Annual Indexes:
	or				
	b. Value of output (constant dollars)				
					Physical Output quantities of products combined with fixed period unit employee hour or unit value weights.
					Deflated Value: Where adequate quantity data are unavailable, indexes are derived on deflated value of output. Where value of shipments data is used in lieu of production data adjustments are made to correct for the change.
					Adjusted to benchmark indexes by interpolation if required.
					Employee Hours Index: Computed by dividing the aggregate employee hours for each year by the base period aggregate.
					PRODUCTION

1/ Census and BLS differ on treatment of leave. Employee hours are determined as total employee hours in the industry--not just primary product. Quality factors are not evaluated.

2/ Some industries apply both weighting schemes at different stages of aggregation.

3/ Unit value weights are compiled from quantity and value of the primary products of the industry.

A. Introduction

The employment data published by the Federal Government are derived from six different surveys. The surveys are published by the Census Bureau and the Bureau of Labor Statistics and are derived from data collected by State agencies and from information drawn from Social Security, IRS, and Unemployment Insurance records.

The Household Survey, a part of the Current Population Survey, is distinct from the others in that it canvasses individual households rather than establishments. For this reason, and due to the fact that the household survey has never been used to measure industry employment, it is not compared with the remainder of the surveys described in this chapter. A discussion of the differences between the Household Survey and employment estimates drawn from establishment data is the subject of an article that appeared in the Monthly Labor Review: "Comparing employment estimates from household and payroll surveys" by Gloria P. Green. (MLR, Dec. 1969, Reprint No. 2651.)

The other five surveys vary in terms of frequency of collection, scope of the survey, lag time to publication, and degree of detail--both industry and geographic--that is eventually published. Differences in definition and coverage occur primarily in the trade and service sectors and are fairly limited in the manufacturing sector.

Explanations of methodology and definitions of terms are included in the introduction and appendices of the publications containing the survey statistics. Further discussion of survey methodology is available in the BLS Handbook of Methods (Bulletin 1711) and in the Handbook of Labor Statistics (Bulletin 1865.)

## 1. The six labor surveys are:

<u>Publication</u>	<u>Survey</u>
Employment and Earnings (Establishment Data)	<u>Current Employment Statistics Program</u> Employment estimates constructed monthly from a sample of payroll and administrative records collected by State agencies in cooperation with BLS. Labor turnover data are compiled from a separate survey.

Employment and  
Wages

Unemployment Insurance Programs  
(State and Federal.) Quarterly  
contribution (tax) reports sub-  
mitted to State employment  
security agencies subject to  
State unemployment laws.

Employment and  
Earnings  
(Household  
Data)

Household Survey (from the Current  
Population Survey.) Conducted  
monthly by the Census Bureau for  
BLS. A sample of 47,000 households.

County Business  
Patterns

Employment & Payroll Information  
required by FICA (Social Security  
Adm.), Establishment Reporting Plan  
& Special Multi-unit Survey. (Treas.  
Form 941.) Published jointly by  
Census and the Social and Economic  
Statistics Adm., U.S. Dept. of  
Commerce.

Annual Survey of  
Manufactures

Annual Survey of Manufactures. A  
sample of 70,000 manufacturing  
establishments selected from the  
latest Census of Mfrs., supplemented  
by Social Security lists of new  
manufacturers.

Census of  
Manufactures

Census of Manufactures. Conducted  
quinquennially, it covers all manu-  
facturers with 10 or more employees  
directly, and compiles data from  
IRS and Social Security records for  
smaller firms not required to com-  
plete Census questionnaires.

## 2. Output Indexes

The two Bureau of Labor Statistics series on labor output  
are "Productivity Indexes for Selected Industries" and  
"Productivity and Costs in the Private Economy." These  
output indexes are briefly described here because they  
are computed for the purpose of deriving output per hour  
indexes--a useful employment indicator. These indexes  
are also discussed in the chapter on production.

B. COMPARISON OF EMPLOYMENT SURVEYS<sup>1/</sup>

Survey Feature	Current Employment Estimates	Household Survey	Unemployment Insurance Program
Frequency/Timing	Monthly - 12th of month	Monthly - 12th of month	Quarterly - monthly data for 12th of month
Description of Survey	Probability sample based on employment size. 46,900 manufacturing establishments-- 60% of all manufacturing employment estimates made using link relative techniques. Form 790 and DL1219, (Labor Turnover)	Rotating/Sample of 47,000 households selected or represent civilian non-institutional population.	Reporting required from all employees with one or more employees covered under State or Federal Unemployment Insurance Programs.
Data Estimation/Review Procedures	Shuttle forms used. Survey benchmarked annually to Unemployment Insurance universe. Industry weights and geographic stratification employed.	Weights for all completed interviews are adjusted for non-response of the rest of the survey panel. A two-step ratio-estimation procedure is then applied.	Largest universe of monthly employment data collected. Data collected by State Employment Security Agencies and compiled on a national basis by Bureau of Labor Statistics.
			1972 Federal legislation expanded coverage and increased consistency of State procedures.
<sup>1/</sup> This description covers manufacturing. Certain other procedures, followed for other economic sectors, are described in the introduction and appendices of the individual survey publication.			

COMPARISON OF EMPLOYMENT SURVEYS<sup>1/</sup>

Survey Feature	County Business Patterns <sup>2/</sup>	Annual Survey of Manufactures	Census of Manufactures
Frequency/Timing	Annual - 12th of every 3rd month for production workers and March 12th for all others	Same as CBP	Quinquennial - same as CBP
Description of Survey	CBP List drawn from Social Security Administration records, and for multi-unit companies, the Establishment Reporting Plan and the Special Multi-Unit Survey. Data drawn from Treasury Form 941-Quarterly Payroll Taxes.	Probability sample of 70,000 manufacturers drawn from Census of Manufactures and supplemented by Social Security Administration lists of new establishments. Sample redrawn after each Census Survey form MA-110.	Census canvass of 175,000 manufacturers supplemented with IRS and Social Security records for small firms excused from reporting. (Approximately 125,000.) Multiple Census reporting forms.
Data Estimation/- Review Procedures	Estimating techniques are used to correct for inaccurate reports and for non-response by small firms. Data are not shown separately for any industry with fewer than 100 employees or 10 reporting units in a specified county or other reporting area. These data appear in the count at a more aggregated industry level.	Data for prior year are included on respondent's reporting form to improve consistency and accuracy of current response. All establishments with over 250 employees in the last Census are included in the sample data.	The Census Bureau has developed a nine-step data screening and editing procedure which is described in the Introduction to the Census volumes.

<sup>1/</sup> This description covers manufacturing. Certain other procedures, followed for other economic sectors, are described in the introduction and appendices of the individual survey publication.

<sup>2/</sup> For changes in the CBP planned for 1976 refer to the chapter on Manufacturing Characteristics.

These labor productivity data are derived primarily from two sources. The series for both the manufacturing sector and individual manufacturing industries are based on information received from the establishment survey referred to above. The output series for the manufacturing sector is derived from GNP data prepared in the Department of Commerce Bureau of Economic Analysis, while the output series for individual industries is based on data provided by the Census Bureau or private organizations such as trade associations.

C. Unemployment Statistics

The national unemployment statistics published each month by the Department of Labor are derived from the Current Population Survey. The definition of unemployment used is: persons who did not work at all during the survey week, were looking for work, and were available for work in the reference period, except for temporary illness. Those who had made specific efforts to find work within the preceding 4-week period--such as registering at a public or private employment agency, writing letters of application, canvassing for work, etc. --are considered to be looking for work. Also included as unemployment are those who were waiting to be called back to a job from which they had been laid off, or were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

Unemployment data are cross-tabulated for a large array of social, demographic and economic statistics including age, sex, color, and marital status, class of worker, occupation and industry of last job, duration of unemployment, reasons for unemployment, and methods used to find employment.

Monthly and quarterly unemployment statistics appear in the press releases "The Employment Situation: and Labor Force Developments", and in Employment and Earnings. BLS also publishes annual estimates of data below the national level derived from the Current Population Survey in a periodical entitled Geographic Profile of Employment and Unemployment.

D. Selected Definitions by Publication or Agency of Use

1. Employment and Earnings (BLS)

Labor Turnover is the gross movement of wage and salary workers into and out of employed status with respect to individual establishments. This movement is divided into accessions (new hires and rehires) and separations (quits and layoffs). This data relates to all employees and is expressed as a rate per 100 employees.

2. Annual Survey and Census of Manufactures (Census), Employment and Earnings (BLS)

Production Workers include working supervisors and all non-supervisory workers engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packaging, warehousing, shipping, maintenance, repair, janitorial, guard services, product development, auxiliary production for plants' own use, record-keeping, and other services closely associated with these production operations at the establishment covered by the report are included. Supervisory employees above the working supervisor level are excluded from this category. They are included under the general categories All Other Employees, All Employees, or Total Employees.

The following table provides the basic methods involved in tabulating employment and earnings statistics. This table appears in the monthly Employment and Earnings publication of the Bureau of Labor Statistics. Further definitions can be found in the appendix of that publication.

3. County Business Patterns (Census)

Reporting units, in manufacturing industries, are conceptually the same as Census establishments (each manufacturing location of a company is a separate reporting unit). In non-manufacturing industries, employers (i.e., separate legal entities) are counted once in each county for each industry in which they operate regardless of the number of establishments operated. Beginning with the 1974 County Business Patterns (published in late 1976), the collection and publication of data will be on an establishment rather than a reporting unit basis.

#### 4. Census

Central Administrative Offices and Auxiliary Units.  
Physical locations separate from the manufacturing plant and serving one or more establishments where storage, plant and equipment maintenance, product and market orientation, engineering and quality control, etc., take place. Where these activities are carried on at a different physical location or are performed for more than one plant, they are excluded from the figures for operating manufacturing establishments and are included in the data shown for central administrative offices and auxiliaries.

Table 1

Summary of methods for computing industry statistics on employment, hours, and labor turnover

Item	Basic estimating cell (industry, region, size, or region/size cell)	Aggregate industry levels (divisions, groups and, where stratified, individual cells)
Monthly data		
All employees . . . . .	All employees estimate for previous month multiplied by ratio of all employees in current month to all employees in previous month, for sample establishments which reported for both months	Sum of all employee estimates for component cells.
Production or nonsupervisory workers, women employees . . .	All employee estimate for current month multiplied by (1) ratio of production or nonsupervisory workers to all employees in sample establishments for current month, (2) ratio of women to all employees.	Sum of production or nonsupervisory worker estimates, or estimates of women employees, for component cells.
Gross average weekly hours . . .	Production or nonsupervisory worker hours divided by number of production or nonsupervisory workers	Average, weighted by production or nonsupervisory employment, of the average weekly hours for component cells
Average weekly overtime hours . . . . .	Production worker overtime hours divided by number of production workers.	Average, weighted by production worker employment, of the average weekly overtime hours for component cells.
Gross average hourly earnings . .	Total production or nonsupervisory worker payroll divided by total production or nonsupervisory worker hours.	Average, weighted by aggregate hours, of the average hourly earnings for component cells.
Gross average weekly earnings . .	Product of gross average weekly hours and average hourly earnings.	Product of gross average weekly hours and average hourly earnings.
Labor turnover rates . . . . .	The number of particular actions (e.g., quits) in reporting establishments divided by total employment in those firms. The result is multiplied by 100.	Average, weighted by employment, of the rates for component cells.
Annual average data		
All employees and production or nonsupervisory workers . . . . .	Sum of monthly estimates divided by 12.	Sum of monthly estimates divided by 12.
Gross average weekly hours . . .	Annual total of aggregate hours (production or nonsupervisory worker employment multiplied by average weekly hours) divided by annual sum of employment.	Annual total of aggregate hours for production or nonsupervisory workers divided by annual sum of employment for these workers.
Average weekly overtime hours . . . . .	Annual total of aggregate overtime hours (production worker employment multiplied by average weekly overtime hours) divided by annual sum of employment.	Annual total of aggregate overtime hours for production workers divided by annual sum of employment for these workers.
Gross average hourly earnings. .	Annual total of aggregate payrolls (production or nonsupervisory worker employment multiplied by weekly earnings) divided by annual aggregate hours.	Annual total of aggregate payrolls divided by annual aggregate hours.
Gross average weekly earnings . .	Product of gross average weekly hours and average hourly earnings.	Product of gross average weekly hours and average hourly earnings.
Labor turnover rates . . . . .	Sum of monthly rates divided by 12.	Sum of monthly rates divided by 12.

From: Bureau of Labor Statistics  
"Employment and Earnings"

E. COMPARATIVE EMPLOYMENT AND WAGE DEFINITIONS

Definition	Employment and Earnings	Employment and Wages	Household Survey	County Business Patterns	Annual Survey and Census of Manufactures
Employment Exclusions	Proprietors, self-employed, unpaid volunteer, and family workers, farm workers, domestic workers and those on leave without pay.	Proprietors, self-employed, unpaid volunteer and family workers, most farm workers, and most domestic workers, and those on leave without pay.	Principal job only is counted. Job is counted regardless whether employees received pay for period.	Self-employed Persons farm workers and domestic service workers, those covered under railroad employment act. Government workers are reported separately.	The Armed Forces, pensioners on rolls but not paid for period, proprietors and partners of unincorporated firms. In certain classifications, employment regarded as not related to manufacturing process is excluded.
Payroll/ - Wages, etc.	Payroll, (used to derive average hourly and weekly earnings), for full and part-time production workers who received pay for any part of the pay period which includes the 12th of the month, reported before deductions of any kind. Bonuses and fringe benefits not counted.	Total Wages, In most states the total amount of compensation paid by the employer for services performed whether or not they were performed during the quarter.	Payroll data not collected	Taxable Payrolls are defined as the amount of taxable wages paid during the January-March quarter. As of 1973 this includes all payments up to the first \$10,800 paid to an employee during the quarter. Beginning with the 1974 issue, total payroll will be reported for the entire year.	Payroll includes the gross annual earnings of employees on the payroll. Includes all forms of compensation and prior to any deductions. The payroll figure is the same as that on which Federal taxes are calculated.

F. Summaries of Employment Surveys

1. Survey: Establishment Data

"Monthly Report on Employment, Payroll and Hours"  
BLS 790

"Monthly Report on Labor Turnover" DL 1219

a. Period Covered, Frequency

Pay period including the 12th of the month. Conducted monthly.

b. Coverage

Sample of over 158,000 establishments, with over 30 million employees. The labor turnover sample covers over 10 million employees.

In manufacturing the coverage is 59% and 52% of employment respectively for the two surveys.

c. Type of Survey

Survey is a probability sample with distribution made according to the ratio of total employment in a size class category to the total employment in an industry. The size of the sample for each industry is determined empirically.<sup>1/</sup>

d. Data Review and Editing

Shuttle forms are used and estimates are made using the "link-relative" technique.

Benchmarking of these BLS estimates is performed annually in March, from comprehensive data collected primarily from state agencies from establishments covered by state unemployment insurance laws.

Benchmarking also adjusts for changes in the industry classification of establishments.

- e. Agency(ies) Conducting: BLS/State Agencies
- f. Title of Publication: Employment and Earnings Monthly for U.S., for States and Areas.
- g. Data Type

Employment, production workers, women employees, weekly hours, weekly and hourly earnings,<sup>1/</sup> overtime hours, labor turnover,<sup>1/</sup> accessions, separations.

1/ Benchmarks are not available for the hours, earnings and labor turnover series. However, employment benchmarks are used as weights in computing averages for broader industry groupings in these series. Revisions made as a result usually are less than 0.2 percent in the manufacturing sector.

2. **Survey: Unemployment Insurance Data  
(State Unemployment Insurance Programs)**

a. Period Covered, Frequency

Three months data published quarterly. Employment data represent the number of workers earning wages during the pay period including the 12th of the month.

b. Coverage

Reports of covered employers in private industry. Data based on administrative records furnish a complete count of insured unemployment among the 3/4 of the Nation's labor force covered by unemployment insurance (UI) programs.

The employment count for those covered under State UI (private industry) programs averaged 56 million in the first quarter of 1972. State and Federal Government UI Program covered employment are also shown.

c. Type of Survey/Report

Employment and wage data are submitted to State employment security agencies by employers subject to state unemployment insurance laws. Exclusions: those laid off because of strikes unpaid sick or holiday leave, those not paid during the period including the 12th of the month, and proprietors, the selfemployed, unpaid family workers, most farm workers, and most domestic service employees. Those amounted to over 12 million workers in 1972.

d. Data Review and Editing

To correct for data gaps caused by late reportings, estimates are made based on respondent's prior return and trends in the industry.

BLS withholds publication of data for which there are fewer than three reporting units for any level of industry detail at the state or national level, or where employment of a single installation or establishment accounts for over 80% of the industry.

In 1972 Federal regulations were imposed to make states reporting coverage more uniform.

e. Agency(ies) Conducting

State employment security agencies. Data is summarized by BLS.

f. Title of Publication: Employment and Wages

g. Data Type - Monthly employment for quarter, and quarterly wages.

3. Survey: The Annual Survey of Manufactures

a. Period Covered, Frequency

Annual. Production workers (mid-month employment for every 3rd month was requested, from which an annual average is computed). Total employment was requested only for mid-March.

b. Coverage

70,000 manufacturing establishments

c. Type of Survey

Probability and cutoff sample. All companies with more than 250 employees surveyed. Sample taken from latest Census supplemented by Social Security and IRS records for new establishments.

d. Data Review and Editing

ASM mailing form provides for entry of current and prior year data. Responses are compared with establishments prior year report. ASM employment data have been coordinated with Social Security records for consistency in classification, coverage, and statistical accuracy.

e. Agency(ies) Conducting: Census

f. Title of Publication: Annual Survey of Manufactures

g. Data Type

All employees, production workers; total payroll, production workers' payrolls.

Contains table showing high degree of comparability with employment data in County Business Patterns.

4. Survey: Census of Manufactures

a. Period Covered, Frequency

Quinquennial. Production workers (mid-month employment for every 3rd month was requested from which an annual average is computed). Total employment was requested only for mid-March.

b. Coverage

175,000 manufacturers

c. Type of Survey

1972 Census forms mailed to all multi-unit establishments and all single unit establishments with 10 or more paid employees. For 130,000 establishments with fewer than 10 employees, data is obtained from administrative records.

d. Data Review and Editing

Census maintains a nine-step computer based editing procedure to assure a high degree of statistical accuracy. A description of these editing and review procedures is given at the beginning of the Census volume entitled General Summary.

e. Agency(ies) Conducting: Census

f. Title of Publication: Census of Manufactures

g. Data Type

All employees, production workers; total payroll and production workers' payroll. Also: establishment and employment count by employment size class.

## 5. Survey: County Business Patterns

Employment and Payroll Information (Treasury Form 941 Schedule A) compulsory, (Social Security records); Supplemented by the Establishment Reporting Plan (voluntary), and the compulsory Special Multi-unit Survey.

Starting with the 1974 CBP (published beginning in late 1976), the Census Organization Survey will also be used.

### a. Period Covered Frequency

For manufacturing: Pay period including the 12th of March. (Other sectors: for periods covered refer to the Introduction to County Business Patterns) Conducted Annually. Starting with the 1974 issue, total payroll for the entire year also will be shown.

### b. Coverage

United States data for 1972 shows 3.5 million reporting units with 58 million employees for all private sectors.

To get necessary county/industry detail, Treasury Form 941 is supplemented by additional surveys described above. The multi-Unit Survey and a supplementary Census survey obtain data from about 4,000 employers who did not report completely under the Establishment Reporting Plan.

Exclusions from coverage: government employees self-employed, farm workers and domestic service employees.

### c. Type of Survey

#### i. Treasury Form 941

Private non-farm employers and non-profit membership under compulsory coverage.

#### ii. Establishment Reporting Plan

Voluntary surveys of employers with 50 or more employees with some in secondary counties or industries.

iii. Special Multi-unit Survey of 4,000 multi-unit employers who did not participate fully, or at all, in the establishment reporting plan.

iv. Company Organization Survey to be used starting with the 1974 issue.

d. Data Review and Editing

The Social Security Administration lumps together in a single reporting unit small scale employers. Census redistributes these by county and industry on the basis of the latest Census.

Estimating techniques are used to correct for inaccurate reports and nonresponse by small firms. These are based on the average of the firms first quarter or mid-March employment-wage ratios or on prior year reports if no employment data were given.

Data are not shown separately for any industry with fewer than 100 employees, or 10 reporting units in a specified county or larger areas. These data will appear in the count at a more aggregated industry level.

e. Agency(ies) Conducting

Census Bureau and the Social Security Administration

f. Title of Publication

County Business Patterns (United States)  
County Business Patterns (for individual states).

g. Data Type

Covered employment, Taxable payrolls January-March.  
Total reporting units. Employees by employment size-class of reporting units.

Starting with the 1974 issue, the CBP will be establishment-based.

6. Survey: Current Population Survey

a. Period Covered, Frequency

Data are collected on activity reported for the calendar week including the 12th of the month. Monthly.

b. Coverage

47,000 households, representing 461 areas in 923 counties and independent cities, covering individuals 16 years of age and older (Approximately 100,000).

c. Type of Survey

Sample includes all SMSA's. Households in a given area are selected according to a sampling ratio rather than fixed quota, and the roster of respondents is rotated over a period of months. Personal interviews are conducted.

d. Data Review and Editing

Ratio estimates are made to bring survey (through weighting factors) into close alignment with the population's composition for age, race, sex, and farm/nonfarm residence.

A comprehensive discussion of these procedures is provided in the BLS Handbook of Methods.

e. Agency(ies) Conducting: Conducted by Census for BLS

f. Title of Publication: Employment and Earnings - Household Data

g. Data Type

A data summary of this survey is not included in this guide.

G. Seasonal Adjustment

The seasonal adjustment method used for these series (selected labor force and establishment data) is an adaptation of the standard ratio-to-moving average method, with a provision for moving "adjustment factors" to take account of changing seasonal patterns. A detailed description of the method is given in the booklet, the BLS Seasonal Factor Method (1969), and the "X-11 Variant of the Census Method II Seasonal Adjustment Program," Technical Paper No. 15, Bureau of the Census.

For establishment data, the seasonally adjusted series on hours, hourly earnings, and labor turnover rates for industry groupings are computed by applying factors directly to the corresponding unadjusted series. However, seasonally adjusted employment totals for all employees and production workers by industry division are obtained by summing seasonally adjusted data for the component industries.

Further descriptions of the seasonal adjustment procedure for principal components of the hours and earnings series is provided in the Explanatory Notes of the monthly Employment and Earnings published by BLS.

H. Principal Data Types

1. Employment, BLS - The Establishment Survey
  - a. Employment and Earnings - United States - 1909 to Present

Principal Data Type: U.S. totals by Selected 4-digit SIC (three and two digit summaries), total employment, women employees, production workers' average weekly and hourly

earnings, average weekly hours, overtime and labor turnover. Monthly and annual averages, with most series starting no later than 1958. Annual.

b. Employment and Earnings - States and Areas - 1939 to present

Principal Data Type: By state and selected major cities/SMSA, employment; and average weekly and hourly earnings, and average weekly hours for production workers. Annual data for major 2 digit and certain 3 digit industries. For some series employment data only are published. This usually occurs at the city level where the total number of employees in a particular industry is quite small.

c. Employment and Earnings - Monthly

Principal Data Type: Total employment (total womens' employment provided quarterly); number of production workers, average weekly hours, average overtime hours, average weekly and hourly earnings for production workers. Labor turnover (accessions and separations) per 100 employees. All categories given monthly for most 2, 3, and selected 4 digit SIC classifications. Many other employment measures are available for total manufacturing: (e.g. seasonally adjusted data, indexes of hours and earnings, hours of salary and wage workers; quarterly changes in compensation, and indexes of output per hour, hourly compensation, unit costs and prices. Most indexes constructed on a quarterly basis.

2. Employment - BLS - Unemployment Insurance Programs

a. Employment and Wages

Principal Data Type: Employment for January, February and March, and quarterly wages for 4 digit SIC industry (state detail provided for 2 digit and selected 3 digit industries). Number of employees by 9 different employment size classes for 4 digit SIC industries. NOTE: The detail described above is included only in the first of the quarterly issues. For the remaining three quarters detail is available only at the 3 digit level, and employment size class breakdowns are not provided.

3. Employment - Bureau of the Census

a. County Business Patterns 1/

Principal Data Type: Employment; number of reporting units, total and by employment size class; and taxable payrolls. U.S. total, state and county, 2-4 digit SIC. The individual State reports present the principal data items by detailed industry (4-digit) level for the state and counties, and by major industry group (2-digit) for Standard Metropolitan Statistical Areas (SMSAs). The U.S. Summary includes data by detailed industry for the U.S. and by major industry group for each state and for total manufacturing by county. Annual.

b. Annual Survey of Manufactures

Principal Data Type: Industry Profiles - Total employment and payroll for U.S. by 4-digit SIC. Statistics for States, SMSAs, and Large Industrial Counties - total employment and payroll; production worker employment, hours and wages; 2-4 digit SIC by state, SMSAs, large industrial counties and selected cities. Employment and Labor Costs for Operating Manufacturing Establishments - total employment and labor costs; payroll, social security and other legally required payments; employer payments for other programs; for U.S. by 4-digit SIC. The same data is provided for a summary of all manufacturing establishments by state. (Standard error of estimate expressed as a percent is also included.) Annual.

c. Census of Manufactures

Principal Data Type: The Census of Manufactures provides most of the employment data available in the Annual Survey. It also provides a count of establishments by employment size class, giving for each of 9 employment size classes total employment, payroll, number of production workers, hours worked, and wages. These data are given by 4-digit SIC for U.S. totals, and 2-digit by Census region, state and county. Quinquennial.

1/ See chapter on Manufacturing Characteristics for planned changes in the County Business Patterns.

Principal Data Type: Provides quarterly indexes, annual averages and percent change from the prior period for total manufacturing for the following data types: output per hour, compensation per hour, unit labor costs, real compensation per hour, output, and hours worked. (Quarterly - press release)

b. Productivity Indexes for Selected Industries

Principal Data Type: Provides indexes (1967-100) of output; hours and employment (for employees, production workers and non-production workers); and indexes of output per hour and output per employee for the same three categories. (Annual)

I. SOURCE SUMMARIES

	Employment and Earnings			Employment and Wages
	(Monthly)	For the United States, 1909-1972	For States and Areas 1939-1971	
Agency/Source	Labor/BLS	Labor/BLS	Labor/BLS	Labor/BLS
Frequency of Issue	Monthly <sup>1/</sup>	Annual	Annual	Quarterly
Publication Started	1955	1961	1960	1938 (quarterly since 1950)
Publication from End of Data Period	7 weeks approximately	8 months	8 months	1 - 1 1/2 years
Time Period Covered	Latest 3 mos. & 2 mos. for previous year.	Time series vary (usually from 1939 or 1947). Monthly and Annual averages	Annual. Most time series beginning 1947	3 mos. (employment) 1 qtr. (wages) 1 yr., annual data for U.S. totals.

PUBLICATIONS CAN BE OBTAINED FROM:

- Local Government Printing Office Bookstore
- Local Bureau of Labor Statistics Field Office

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

<sup>1/</sup> Annual data are summarized in one of the early issues of the following year.

SOURCE SUMMARIES

	County Business Patterns	Annual Survey of Manufactures	Census of Manufactures
Agency/Source	Census	Census	Commerce/Census
Frequency of Issue	Annual (from 1965)	Annual	Quinquennial
Publication Started	1949	1949	1947 <sup>1/</sup>
Publication from End of Data Period	Varies by State. U.S. volume, 24 months	1-2 years	
Time Period Covered	Current and prior year. Mid-March employment. First quarter payrolls.	Current year and prior year	Census year. Some data for prior Census year. Time series for provided certain summary data.
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>			
Local Government Printing Office Bookstore	Local Commerce Department Field Office	Superintendent of Documents Government Printing Office Washington, D.C. 20402	

<sup>1/</sup> Censuses of manufactures on a selected basis were conducted at 10-year intervals from 1810-1899. Quinquennial 1904-1919; biennial, 1921-1939, and suspended during World War II.

Data Type.	EMPLOYMENT & EARNINGS			Employment and Wages
	Monthly	For the U. S. <sup>2/</sup>	For States and Areas	
<u>Employment</u>				
Total U.S.	X (3-4)	X (2-4)	Mfg.	X (3) <sup>4/</sup>
<u>Region/Division</u>				
State	Mfg.		X (2-3)	X
County			X <sup>3/</sup>	
BLS Area	Mfg.		X	
Women	X	X		
<u>Production workers</u>				
	X	X	X	
<u>Payroll</u>				
<u>Wages</u>				
Average Hourly & Weekly Earnings	X	X	X	(Quarterly)
<u>Employee Hours</u>				
Average Weekly Hours	X	X	X	
<u>Labor Turnover</u> <sup>1/</sup>	X	X		
<u>Establishment/Reporting Unit</u>				
...by Employment size class				Establishments (first quarter issue only)
<u>Other</u>	Average overtime hours (3-4) Indexes of Employment, aggregate weekly hours and payrolls, (2).	Average weekly overtime hours for some industries.		
NOTE: Number in parentheses indicates the highest SIC detail published. Other data indicated are published at the highest detail level shown, except where noted.				
Footnotes on following page.				

FOOTNOTES: BLS EMPLOYMENT DATA  
(Principal Data Types at a Glance)

- 1/ Most labor turnover data broken out by accessions, new hires, separations, quits and layoffs per 100 employees.
- 2/ Time series monthly beginning no later than 1958.
- 3/ Many counties, or groupings of counties, are the equivalent of BLS areas. A list of the composition of the BLS areas is included as Appendix A of the publication.
- 4/ Four-digit detail is provided in the first quarter issue.

## PRINCIPAL DATA TYPES AT A GLANCE

Data Type	County Business Patterns U.S.	County Business Patterns States	Annual Survey of Manu- factures	Census of Manu- factures
<u>Employment</u>				
Total U.S.	X (4)		X (4)	X (4-5) <sup>3/</sup>
Region/Division			X (2-4)	X (4)
State	X (2)	X (4)	X (2-4)	X (4)
County		X (4)	X Mfg.	X (2-3) <sup>4/</sup>
SMSA's, etc.		X (2)	X (2-3)	X (4)
Women				
<u>Production</u>				
<u>Workers</u>			X	X
<u>Payroll</u>	X <sup>1/</sup>	X <sup>1/</sup>	X <sup>2/</sup>	X
<u>Wages</u>			X	X
<u>Average Hourly &amp; Weekly Earnings</u>				
<u>Employee Hours</u>			X	X
<u>Average Weekly Hours</u>				
<u>Labor Turnover</u>				
<u>Establishment/ Reporting Units</u>	X	X		X
...by Employment size class	Number of Reporting Units	Number of Reporting Units		Number of Establishments and Employment For Operating Manufacturing Establishments by form of ownership

NOTE: Number in parentheses indicates the highest SIC detail published. Other data indicated are published at the highest detail level shown except where noted.

Footnotes on following page.

FOOTNOTES: CENSUS EMPLOYMENT DATA  
(Principal Data Type at a Glance)

- 1/ Taxable payrolls for January-March period.  
Beginning with the 1974 issue (to be published in 1976) annual payroll data also will be published.
- 2/ Provides separately total labor costs, and "Social Security and other legally required payments." Labor costs provided only down to state level.
- 3/ Also shows number of establishments with 75 percent or more specialization.
- 4/ Selected cities are sometimes shown, usually at the 1-2 digit level. Employment by size-class distribution is given, by country, for major industry groups at the 2-digit level.

K. SUMMARIES OF DATA TYPES BY PUBLICATION

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Employment</u> <u>Hours and Earnings</u> All employees, (Production workers) Women employees, Production workers. Average weekly overtime hours. <sup>1/</sup> Average weekly and hourly earnings.	<u>Labor Turnover</u> (per 100 employees) Accessions, new hires, separations, quits and layoffs. BLS	Employment and Earnings United States 1909-to present 3 & 2 digit summaries	SIC selected 4-digit and 3 & 2 digit summaries Establishment
Annual issue showing monthly data and annual averages. Most series begin in 1958.	<u>Employment</u> <u>Hours and Earnings</u> All employees (Production workers) Average weekly hours, Average weekly and hourly earnings.	<u>Geographic</u> Detail by State, and 227 major labor areas <sup>2/</sup> BLS	Selected 2 and 3 digit SIC. All manufacturing totals States and Areas 1939-to present BLS
Annual. Most state series begin in 1958.			

<sup>1/</sup> For some series  
<sup>2/</sup> These usually correspond to SMSA's, a complete listing is provided in the Appendix.

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Employment</u>	<u>Hours and Earnings</u>	<u>Labor Turnover</u>	Establishment
All employees, women's employment, production workers	(Production workers) Average hourly and weekly earnings. Average weekly hours and average overtime	(per 100 employees) Accessions, new hires, total separations, quits and layoffs.	Selected 4-digit SIC plus summaries at 3 and 2 digit level BLS
Monthly. Preliminary for 2 months preceding issue date and comparisons with same month prior year.			
<u>Employment</u>	<u>Hours and Earnings</u>	<u>SIC = 20 major industry groups</u>	Establishment
All employees and production workers: last 13 months seasonally adjusted.	(Production workers) Average hourly earnings excluding overtime. Indexes of aggregate weekly hours <sup>1/</sup> and payrolls. Average weekly hours, seasonally adjusted		
Most series Monthly. Preliminary for 2 months preceding issue date and comparisons with same month prior year.			
Historical indexes of employment (f 1919) Employment and, for production workers, Average Weekly Hours, and Gross Average Weekly and Hourly Earnings for States and areas. Last 2 months, same month previous year.	Employment and Earnings (Monthly) BLS	All Manufacturing	Establishment
Indexes of Average Hourly Earnings. Indexes of OUTPUT PER HOUR, hourly compensation, and unit costs seasonally adjusted for eleven quarters. Also percent changes from previous quarter at annual rates.			
Labor turnover (per 100 employees) total accessions, new hires, total separations, quits and layoffs monthly from 1961.			
<u>1/ Seasonally adjusted and unadjusted.</u>			EMPLOYMENT

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<p><u>Employment</u></p> <p><u>Covered employment for the U.S., and by State</u></p> <p><u>1st. Quarter Issue</u> provides 4-digit detail for total employment and distribution by EMPLOYMENT SIZE CLASS.</p>	<p><u>Quarterly Wages</u></p> <p>Wages for quarter in same industry detail as provided for employment.</p> <p>Monthly data for quarter issue is dated.</p>	<p>Employment and Wages BLS</p>	<p>SIC 2 and selected 3-digit level.</p>
<p><u>Employment</u></p> <p><u>U.S., state, and county;</u></p> <p><u>No. of employees, Mid-March Pay period</u></p>	<p><u>Taxable Payrolls<sup>1/</sup></u></p> <p>Total for U.S., State and counties. Also: number of reporting units in each of 8 employment size classes</p>	<p>County Business Patterns Census</p>	<p>SIC 4-digit, with 3 &amp; 2 digit summaries. Four digit detail by State and county available only in state volumes. (U.S. summary provides only 2 digit state totals.)</p>
	<p>Data for Mid-March reporting period</p> <p>Annual</p>		<p>"Reporting Unit"</p>

1/ Beginning with the 1974 issue the series is being expanded to include payrolls for the entire year.

EMPLOYMENT

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Employment</u> Total/Production workers, U.S. (4). State, SMSA large industrial counties and selected cities, (2-4)	A. <u>Payroll</u> (all employees) B. Wages, Man-hours (Production workers).	<u>Labor Costs</u> Total Payroll. Social Security and other legally required payments, U.S. (4). Summary by state for total manufacturing	Annual Survey of Manufactures Bureau of the Census ANNUAL

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
A. Employment	Payroll All employees	Census of Manufactures	SIC 4-digit except where other detail is noted in parentheses.
1. <u>Total U.S.</u>	Hours/Wages	Bureau of the Census	Establishment
2. <u>"</u>	Establishment count by 9 employment size classes.		
3. " "	For Operating Manufacturing Establishments: Form of ownership (I.E., corporate or non-corporate ownership, partnership, single or multi-unit companies)		
4. " "	Total and total for establishments with more than 75% specialization (5).		
5. <u>State, SMSA,</u>	Counties and Cities		
6. <u>"</u>	Establishment count by employment size class (2).		
	Also:		
B.	Central Administrative Offices and Auxiliaries		
C.	Establishment and employment count by 7 employment size categories. (2).	Quinquennial	EMPLOYMENT

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
Output, Hours, Output per hour, Unit Labor Costs, Compensation per hour, Real Compensation per hour	1. Percent change from prior quarter and same quarter prior year. 2. Annual average percent change	Productivity and Costs in the Private Economy BLS (with data from Commerce/ BEA and the Federal Reserve Board)	Total Manufacturing Establishment
Quarterly			Establishment
1. Indexes of Total Output	2. Indexes of Employment and Man-hours for: A. Employees B. Production workers C. Non-production workers	Productivity Indexes for Selected Industries BLS Annual. Data from 1939 or 1947 through latest year.	SIC 3 and selected 4-digit

NOTE: See chapter on Production.



A. Introduction

The Foreign Trade statistics program conducted by the Bureau of the Census provides for the compilation and dissemination of data relating to the imports and exports of the U.S. The data are presented in the form of publications that are available by subscription and in reports and machine tabulations that are distributed to Department of Commerce field offices and Bureau of Customs offices for public reference use.

The government uses the foreign trade statistics in developing the merchandise trade figures in balance of payments accounts, to appraise and analyze major movements and trends in international trade, to plan and evaluate major foreign aid and trade programs, and to measure the impact of tariff and trade concessions under the GATT. The foreign trade data are also used extensively as a statistical base to implement and analyze operations under various international agreements, such as the Long Term Textile Arrangement, and the U.S.-Canadian Automotive Agreement.

The interrelationships among the various commodity classification systems used to compile the U.S. foreign trade statistics are shown in U.S. Foreign Trade Statistics, "Classifications and Cross-Classifications."

The Foreign Trade (FT) series are serial publications of the Census Bureau and fall into three general categories. The summary reports combine export and import data and specific information on vessel entrances and clearances, and fuel use by vessels laden in the U.S.

Detailed reports provide current month and cumulative data by specific commodity and country. Annual reports also may provide detailed data, but only on an annual basis for the current year.

Foreign trade publications include an introductory section that provides definitions of terms used in the publication, brief statements of methodology and special announcements of changes or special information included in the particular issue.

A second major part of the Census statistical program is the preparation of tabulations and reports in special formats that contain greater detail than the statistics

presented in published reports. These reports are available for reference at Commerce Department field offices; at the Trade Information Branch at the Bureau of the Census located in Suitland, Maryland; or at the U.S. Trade Reference Room in the Main Commerce Building in Washington, D.C. In addition copies of foreign trade machine tabulations may be obtained in the form of microfilm, magnetic tapes, and photocopies of microfilm. These services are available directly from the Bureau of the Census, Washington, D.C. 20233 or from the U.S. Department of Commerce, National Technical Information Service, Springfield, Virginia 22151.

## 1. Special Services

The Census Bureau also has a service whereby users of foreign trade statistics may obtain data prepared to meet their special needs on a cost-to-subscriber basis. Utilizing this service, statistics users may obtain information at an earlier date or may obtain data in greater detail or in different format than that available in the publications which are regularly released.

Requests for additional information in regard to the preparation and release of foreign trade special reports prepared on a cost basis should be addressed to the Foreign Trade Division, Bureau of the Census, Washington, D.C. 20233.

## 2. Aids to the User of Census Trade Statistics

There are three Census publications that can be helpful to user of Bureau of the Census Foreign Trade Statistics.

All three publications are obtainable from the Superintendent of Documents, Washington, D.C. 20402.

- a. The Bureau of the Census Catalogue of Publications 1790-1972 contains a chapter on foreign trade that lists all the Foreign Trade Publications and describes the data they contain. The chapter includes historical series that have been discontinued, and indicates current series that were previously published under another name or format.
- b. The semi-annual and annual issues of the Bureau of the Census Catalogue, provide similar data for current foreign trade publications only, but also indicate

whether an individual publication is obtainable from the Census Bureau as well as the Superintendent of Documents. Order blanks are provided at the back of the publication.

- c. The Guide to Foreign Trade Statistics provides detailed tables of data types to be found in the Foreign Trade series and tabulations. It also provides sample formats of all tables presented in both the FT series and tabulations.
- d. The publication entitled U.S. Foreign Trade Statistics "Classifications and Cross-Classifications", brings together all schedules of commodity and geographic trade classifications currently being used in the compilation and publication of U.S. foreign trade statistics. It consists of three basic parts:
  1. nine sections of correlations between the principal trade classifications, including brief descriptions of the classifications themselves
  2. definitions and listings of Census trade schedules
  3. appendices itemizing the principal differences between related trade classifications

\* \* \* \* \*

B. Principal Import Definitions

1. General Imports are defined as total arrivals of merchandise. They include imports for immediate consumption and those entering warehouses for later consumption or exportation.
2. Imports for Consumption are total arrivals for immediate consumption and withdrawals from warehouses for consumption.
3. Shipping Weight figures represent the gross weight of shipments. This is required to be reported only for shipments by vessel and air.
4. Country of Origin is defined as the country in which the goods were grown, mined, or manufactured. If the origin is unknown, the merchandise is credited to the country of shipment.
5. Customs District. Under the heading "All methods of transportation", imports are credited to the customs district of entry -- the official district of customs clearance. This may not be the district of arrival or of final destination. When data is broken out into imports by vessel and by air, the customs district is the district of unloading.

Where Customs value is shown, valuation represents the value of imports as appraised by the U.S. Customs Service. It may be based on the foreign market value, export value, constructed value, American Selling Price, etc. It also excludes U.S. import duties and transportation costs. This valuation is primarily used for collection of import duties and frequently does not reflect the actual transaction value.

6. The f.a.s. import value represents the transaction value of imports at the foreign port of exportation. It is based on the purchase price, i.e., the actual transaction value, and generally includes all charges incurred in placing the merchandise alongside the carrier at the port of exportation in the country of exportation.
7. The c.i.f. import value represents the value of imports at the first port of entry in the United States. It is based on the price and includes all freight, insurance,

and other charges (excluding U.S. import duties).  
/If the merchandise was acquired in the transaction between related parties, the purchase price is based on an arms-length equivalent transaction price (i.e. a price which would exist between unrelated buyers and sellers)./

8. Coverage Import statistics reflect both government and non-government imports of merchandise from foreign countries into U.S. Customs territory (the 50 states, the District of Columbia, and Puerto Rico).
9. Estimated Data for Low-Valued Imports. The import statistics include estimated data for shipments valued under \$251. The estimates are based on a 1 percent sample. (A 5 percent sample had been used to estimate data for 1973, 1970, and 1967.) These estimates are shown in the Schedule A and TSUSA classifications under separate classifications and are excluded from the other commodity codes. They are, however, included in the country, continent, and area totals and the total for U.S. imports. Details regarding the estimating procedure are contained in Report FT 135. Information also appears in other individual import reports, and in the Census Guide to U.S. Foreign Trade Statistics.

C. Principal Export Definitions

1. Domestic Exports are goods grown, mined, or manufactured in the U.S., and foreign goods which have been further processed or enhanced in value in the U.S.
2. Foreign Merchandise Exports are goods that have not been altered between their importation into the United States and their exportation to other countries.
3. Shipping Weight figures represent the gross weight of shipments. This is required to be reported only for shipments by vessel and air.
4. Country of Destination is defined as the country of ultimate destination as known to the shipper at the time of exportation. Statistics will tend to be overcounted for shipments to transshipment countries such as Hong Kong, Belgium, Netherlands, etc., and undercounted to some extent for other countries.

5. Customs District. Export shipments are credited statistically to the customs district through which the shipment clears when it leaves the United States. Therefore, the customs district is not necessarily the district in which the merchandise was grown, manufactured, or otherwise originated. Specifically, exports by vessel or air are credited to the customs district in which the merchandise is loaded; aircraft exported under their own power are credited to the customs district from which they are flown out of the United States; and exports by rail, truck or pipeline are credited to the customs district through which the merchandise crosses the U.S. border into foreign territory.
6. Valuation: The value reported in the export statistics generally is equivalent to an f.a.s (free alongside ship) value at the U.S. point of export: based on the transaction price, including freight, insurance and other cost incurred in transport to the U.S. port of export.
7. Coverage Export statistics reflect both government and non-government exports of domestic and foreign merchandise from U.S. Customs territory (the 50 states, the District of Columbia and Puerto Rico) to foreign countries.

The statistics include shipments of commodities for economic and military assistance under the Foreign Assistance Act. (Separate totals for these exports are provided in the FT 990). P.L. 480 agricultural shipments are also included. Data on P.L. 480 exports appear quarterly in the FT 990.

Exports of electrical energy are excluded from export statistics.

8. Estimated Data for Low Valued Exports

The statistics for countries other than Canada reflect fully compiled data for shipments valued \$1,000 and over combined with estimated data for shipments valued from \$251-\$999, based on a 50 percent sample of such shipments.

For Canada, the statistics reflect fully compiled data for shipments valued \$2,000 and over combined with estimated data for shipments from \$251-\$1,999 based on a 10 percent sample of such shipments. The value of exports that fall within the range of the sample is around 3 percent of the total value of exports.

Data for shipments valued less than \$251 to all countries are omitted from the statistics shown for the detailed commodity classifications, with value data for such shipments grouped under the special Schedule B commodity number 931.0040. Exports classified under this number represent about 1.5 percent of total exports.

A description of sampling procedures can be found in the Census Guide to Foreign Trade Statistics and in the introductions of the individual foreign trade export publications.

D. Principal Data Types

1. Foreign Trade Series - Imports

U.S. Department of Commerce, Bureau of the Census

a. FT 135 U.S. General Imports. Schedule A Commodity by Country

Principal Data Type: 7 digit Schedule A Commodity by of Origin. Customs value, f.a.s. and c.i.f. plus net quantity, current month and cumulative January to date. Monthly

b. FT 150 U.S. General Imports. Commodity by World Area

Principal Data Type: Schedule A subgroup (4 digit) by World Area and Country of Origin, by method of transportation. Annual

c. FT 155 U.S. General Imports. World Area by Commodity Groupings

Principal Data Type: Continent and country of origin by Schedule A Commodity Groupings by method of transportation; also world area of origin by Schedule A Commodity Groupings. Annual

d. FT 210 U.S. Imports. Consumption and General. SIC-Based Products by World Areas

Principal Data Type: Imports for consumption and general imports (net quantity and value) 8 digit SIC based import product code by world area of origin. Annual

e. FT 246 U.S. Imports for Consumption and General Imports. TSUSA Commodity by Country of Origin

Principal Data Type: Net quantity and value of imports for each 7 digit TSUSA commodity by country. Annual

f. FT 130 U.S. General Imports. Cotton Manufactures

Principal Data Type: Net quantity (current month and cumulative) of U.S. general imports of cotton manufactures, and country of origin by Geneva agreement category. Monthly

2. Foreign Trade Series - Exports  
U.S. Department of Commerce, Bureau of the Census

a. FT 410 U.S. Exports. Schedule B Commodity by Country

Principal Data Type: Net quantity and value of exports of domestic merchandise (Schedule B 8-digit commodity) by country. Monthly

b. FT 450 U.S. Exports. Schedule B Groupings by World Area

Principal Data Type: Schedule B subgroup (4 digit) by World Area and country of destination by method of transportation. Annual

c. FT 455 U.S. Exports. World Area by Schedule B Groupings

Principal Data Type: Continent and country of destination by Schedule B groupings by method of transportation. Also world area of destination by Schedule B commodity groupings. Annual

d. FT 610 U.S. Exports. SIC-Based Products by World Area

Principal Data Type: Net quantity and value of exports, SIC-based export product code by world area. Annual

3. Foreign Trade Series - General

a. FT 900 U.S. Export and Import Merchandise Trade

Principal Data Type: Total exports and imports and merchandise trade balance, seasonally adjusted and unadjusted. Monthly, current and prior year

b. FT 990 Highlights of U.S. Export and Import Trade

Principal Data Type: Provides merchandise trade data published in the FT 900. Data are also shown on quantity and value of U.S. exports (domestic and foreign merchandise), and imports (general and for consumption). Statistics for exports are shown by selected Schedule B commodity groupings and principal commodities, and statistics for imports are shown by selected Schedule A commodity groupings and principal commodities. Data for exports and imports are presented by world area, country of destination (exports), country of origin (imports), U.S. customs districts and regions and method of transportation. Figures are given for the current and previous month, cumulative year-to-date, and comparisons with a year ago. Gold movements are now reported in the FT 990. Monthly.

#### 4. Foreign Trade Series - Subject Reports

##### a. FT 810 Bunker Fuels

Principal Data Type: Total quantity and value of oil and coal laden on domestic and foreign vessels engaged in U.S. foreign trade and Canadian vessel passing through Great Lakes ports. Data not included in U.S. export statistics. Monthly

##### b. FT 975 Vessel Entrances and Clearances

Principal Data Type: Number and Net Registered Tonnage of U.S. and Foreign Flag Vessels Entered and Cleared with Cargo and in Ballast in the Foreign Trade of the U.S. by Customs District and Ports of Entry. Annual

##### c. FT 985 Waterborne Exports and General Imports

Principal Data Type: Total exports and imports (shipping weight) by: customs district and port, dry cargo and tanker; foreign trade area by type of vessel, U.S. flag share; and coastal district. Monthly, Annual Summaries

##### d. FT 800 U.S. Trade with Puerto Rico and U.S. Possessions

Principal Data Type: U.S. trade with Puerto Rico by commodity (Schedule B/Schedule P). Trade between U.S. and Virgin Islands, Guam, and American Samoa (Schedule B subgroup/TSUSA commodity). Monthly

5. U.S. Foreign Trade Series - Special Reports

a. U.S. Commodity Exports and Imports as Related to Output  
Bureau of the Census

Principal Data Type: Exports as a percent of output (shipments) and imports as a percent of new supply (output plus imports). Also value of shipments/production. Annual basis.

b. U.S. Exports and Imports Classified by OBE End-Use Commodity Categories Bureau of Economic Analysis

Principal Data Type: U.S. exports and imports by end-use categories on global basis. Summary time series 1923-1968.

E. Definition of "Schedules" used in U.S. Foreign Trade Statistics.

Schedule A - Statistical Classification of Commodities Imported Into the United States

Schedule B - Statistical Classification of Domestic and Foreign Commodities Exported From the United States

Schedule C - Classification of Country Designations for U.S. Foreign Trade Statistics

Schedule D - Classification of U.S. Customs Districts and Ports for U.S. Foreign Trade Statistics

Schedule P - Commodity Classification for Reporting Shipments from Puerto Rico to the United States

Schedule K - Classification of Foreign Ports by Geographic Trade Area and Country

Schedule R - Classification and Definitions of Foreign Trade Areas

F. Detail of Country Coverage by World Area in Census Foreign Trade Statistics

LISTING OF COUNTRIES INCLUDED IN EACH WORLD AREA

WESTERN HEMISPHERE	WESTERN EUROPE	ASIA (Continued)	AFRICA
CANADA	ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT	JAPAN	Morocco
20 LATIN AMERICAN REPUBLICS	European Economic Community	OTHER ASIA	Algeria
Central American Common Market	Netherlands	Near East Asia	Tunisia
Guatemala	Belgium and Luxembourg	Syrian Arab Republic	Libya
El Salvador	France	Lebanon	Egypt
Honduras	West Germany	Iraq	Sudan
Nicaragua	Italy	Iran	Canary Islands
Costa Rica	European Free Trade Association	Israel	Spanish Africa, n.e.c.
Latin American Free Trade Association	UNITED KINGDOM	Jordon	Equatorial Guinea
Mexico	OTHER EFTA COUNTRIES	Gaza Strip	Mauritania
Colombia	Iceland	Kuwait	Federal Republic of Cameroon
Venezuela	Sweden	Saudi Arabia	Senegal
Ecuador	Norway	Qatar	Mali
Peru	Finland	United Arab Emirates (or Union of Arab Emirates)	Guinea
Bolivia	Denmark	Yemen Arab Republic (Yemen-Sana)	Sierra Leone
Chile	Austria	Oman	Ivory Coast
Brazil	Switzerland	Yemen (Aden)	Ghana
Paraguay	Portugal	Bahrain	Gambia
Uruguay	Other OECD Countries	South Asia	Niger
Argentina	Ireland	Afghanistan	Togo
Other Latin American Republics	Spain	India	Nigeria
Panama	Greece	Pakistan	Central African Republic
Cuba	Turkey	Nepal	Gabon
Haiti	OTHER WESTERN EUROPE	Ceylon	Chad
Dominican Republic	Azores	Asia, n.e.c.	British West Africa
OTHER WESTERN HEMISPHERE	Gibraltar	Burma	Madelra Islands
Greenland	Malta and Gozo	Thailand	Upper Volta
Miquelon and St. Pierre Islands	Yugoslavia	South Vietnam	Dahomey
British Honduras	Cyprus	Laos	Angola
Canal Zone	COMMUNIST AREAS IN EUROPE	Cambodia (Khmer Republic)	Congo (Brazzaville)
Bermuda	East Germany	Malaysia	Western Portuguese Afrca, n.e.c.
Bahamas	Czechoslovakia	Singapore	Liberia
Jamaica	Hungary	Indonesia	Zaire
Leeward and Windward Islands	Estonia	Phillippines	Burundi
Barbados	Latvia	Macao	Rwanda
Trinidad and Tobago	Lithuania	Southern and Southeastern Asia, n.e.c.	Somali Republic
Netherlands Antilles	Poland	Republic of Korea	Ethiopia
French West Indies	Union of Soviet Socialist Republics	Hong Kong	Afars and Issas (French)
Guyana	Albania	Peoples Republic of China	Uganda
Surinam	Rumania	Nansei Islands, n.e.c.	Kenya
French Guiana	Bulgaria	AUSTRALIA AND OCEANIA	Seychelles and Dependencies
Falkland Islands	ASIA	Australia	Tanzania
	COMMUNIST AREAS IN ASIA	Papau New Guinea	Mauritius and Dependencies
	North Vietnam	New Zealand	Mozambique
	China (Mainland)	Western Samoa	Malagasy Republic
	Outer Mongolia	British Pacific Islands	French Indian Areas
	North Korea	French Pacific Islands	Republic of South Africa
		Trust Territory of the Pacific Islands	Botswana
		Other Pacific Islands, n.e.c.	Zambla
			Swaziland
			Rhodesia
			Malawi
			Lesotho
			Unidentified Continents
			Unidentified Countries

G. SOURCE SUMMARIES

	FT 135 U.S. General Imports/Schedule A Commodity by Country	FT 150 U.S. General Imports/Schedule A Groupings by World Area	FT 155 U.S. General Imports/World Area by Commodity Groupings
Agency/Source	Commerce/Census	Commerce/Census	Commerce/Census
Frequency of Issue	Monthly & Cumulative	Annual	Annual
Publication Started	January 1967	Annual version - 1968 (1967 data)	Annual version 1968 (1967 data)
Publication from End of Data Period	3-6 months	9 months	9 months
Time Period Covered	Current month and cumulative from January	Calendar Year	Calendar Year
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>			
Local Government Printing Office Bookstore		Superintendent of Documents Government Printing Office Washington, D.C. 20402	
Local Commerce Department Field Office			(Single issue or annual subscription)

SOURCE SUMMARIES

Agency/Source	Commerce/Census	Commerce/Census
Frequency of Issue	Annual	Annual
Publication Started	1964	1964
Publication from End of Data Period	11 months	12 months
Time Period Covered	Calendar Year	Calendar Year
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>		
Local Government Printing Office Bookstore	Superintendent of Documents Government Printing Office Washington, D.C. 20402	
Local Commerce Department Field Office	(Single issue or annual subscription)	

SOURCE SUMMARIES

	FT 410, U.S. Exports Schedule B Commodity by Country	FT 450, U.S. Exports Schedule B Groupings by World Area	FT 455, U.S. Exports World Area by Schedule B Groupings
Agency/Source	Commerce/Census	Commerce/Census	Commerce/Census
Frequency of Issue	Monthly*	Annual	Annual
Publication Started	January 1943	1967	1967
Publication from End of Data Period	3 months	6 months	6 months
Time Period Covered	Current Month and cumulative from January	Calendar Year	Calendar Year

PUBLICATIONS CAN BE OBTAINED FROM:  
(Single issue or annual subscription)

Local Government  
Printing Office Bookstore  
Local Commerce Department  
Field Office

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

\* Cumulative with annual data in December issue.

SOURCE SUMMARIES

	FT 610 U.S. Exports Domestic Merchandise SIC-Based Products by World Areas	FT 900 U.S. Exports and Import Merchandise Trade	FT 990 Highlights of U.S. Export and Import Trade
Agency/Source	Commerce/Census	Commerce/Census	Commerce/Census
Frequency of Issue	Annual	Monthly	Monthly
Publication Started	1967 (includes 1965 data)	December 1972	January 1967
Publication From End of Data Period	18 months	1 month	2 months
Time Period Covered	Calendar Year	Monthly data for current and preced- ing year.	Time period varies by table. Data usually quarterly, monthly or current month only.

PUBLICATIONS CAN BE OBTAINED FROM:

(Single issue or annual subscription)

Local Government  
Printing Office Bookstore  
Local Commerce Department  
Field Office

Superintendent of Documents  
Government Printing Office  
Washington, D. C. 20402

## SOURCE SUMMARIES

	FT 800 U.S. Trade with Puerto Rico and U.S. Possessions	FT 810 Bunker Fuels	FT 975 Vessel Entrances and Clearances
Agency/Source	Commerce/Census	Commerce/Census	Commerce/Census
Frequency of Issues	Monthly & Annual summaries	Monthly & Annual summaries	Annual
Publication Started	1942	1948	1945
Publication from End of Data Period	4 months	4 months	9 months
Time Period Covered	Current month	Current Month	Calendar Year

PUBLICATIONS CAN BE OBTAINED FROM:

Local Government  
Printing Office Bookstore

Local Commerce Department  
Field Office

Superintendent of Documents  
Government Printing Office  
Washington, D. C. 20402

Publications Services  
Bureau of the Census  
Room 1061 - Building #4  
Washington, D.C. 20233

SOURCE SUMMARIES

	FT 985 Waterborne Exports and General Imports	FT 986 Airborne Exports and General Imports
Agency/Source	Commerce/Census	Commerce/Census
Frequency of Issue	Monthly with annual summaries	Monthly with annual summaries
Publication Started	1952	1962
Publication from End of Data Period	3 months	2 months
Time Period Covered	Current Month	Current Month
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>		
Local Government Printing Office Bookstore	Local Commerce Department Field Office	Superintendent of Documents Government Printing Office Washington, D.C. 20402
		Publications Services Bureau of the Census Room 1061 - Building #4 Washington, D.C. 20233

SOURCE SUMMARIES

	U.S. Commodity Exports and Imports as Related to Output	U.S. Exports and Imports "Classified by OBE End-Use Commodity Categories" 1923-1968
Agency/Source	Commerce/Census	Commerce/Office of Business Economics
Frequency of Issue	Annual	First Issue
Publication Started	1961 (1958 data)	1970
Publication from End of Data Period	3 Years	Not applicable

PUBLICATIONS CAN BE OBTAINED FROM:

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402

SOURCE SUMMARIES

<u>CURRENT INDUSTRIAL REPORTS</u> (CIR General Reports)	
Agency/Source	Manufacturers' Export Sales and Orders of Durable Goods. Commerce/Census.
Frequency of Issue	Monthly
Publication Started	1963
Publication from End of Data Period	5 weeks
Time Period Covered	Current & Prior month. Same period prior year.
	161 "Current" year. Prior year data also provided in most cases.
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>	
Local Government Printing Office Bookstore	Superintendent of Documents Government Printing Office Washington, D. C. 20402
Local Commerce Department Field Office	Publications Services Bureau of the Census Room 1061 - Building #4 Washington, D.C. 20233
	FOREIGN TRADE

These tables are designed so that the user can see the specific types of data available in the individual foreign trade publications.

An "x" is shown when data for that category is published in all the tables. Numbers indicate that the data category is given in a specific table only. These numbers occur in the columns for the FT's 135, 410 and 990. In the FT 990, these numbers refer to the separate export and import sections. Data for the combined trade section at the front of this publication are not summarized.

The levels of classification detail are provided under the "Classified by" category for most publications except the FT 990. The degree of detail for the data types shown in the FT 990 usually ranges from the 2-4 digit level; the degree of numerical detail for individual tables is not shown. When an expression such as "4-1'D" appears, this indicates four digits as the highest level of detail with summaries given to the one digit level.

The footnotes appear at the end of the table.

## DATA TYPES AT A GLANCE

EXPORTS	FT 410	FT 450	FT 455	FT 610	FT 990
Domestic	1, 2	X	X	X	5, 6
Domestic and Foreign	Foreign only				<u>14/</u> , 2, 3, 4, 7, 8 <u>5/</u> , 9
By World Area <sup>1/</sup>	3	X <u>2/</u>	X <u>2/</u>	X	3, 6, 7, 8
By Country	2, 3	X	X <u>3/</u>		3
By Method of Transport		X	X		2, 8
By Customs Region and District Classified by: D = Digit					X (excluding 7 and 9)
Schedule B	1 4-1-D	4-1-D	4-1-D		
SIC Export Product Code	2,3 7-D		8-D		
OBE End-Use Export Code				7, 9	
Quantity					
Net	2,3		X	X	3
Shipping Weight		X	X		3, 4, 8
Value	X	X	X	X	X
Customs Value					
f.a.s.	X	X	X	X	X
Annual		X	X	X	
Monthly					Current & prior and/or cumulative
Other					Customs Region - 8; Customs Region & District 4, 5
					EXPORTS

## DATA TYPES AT A GLANCE

<u>IMPORTS</u>	FT 135	FT 150	FT 155	FT 210	FT 246	FT 990
General	X	X	X	X		
For Consumption				X		1*, 2, 4a*, 4b*, 5, 6, 7, 8, 9a, 9b, 10 <sup>4</sup> /
By World Area/ <sup>1</sup>	X <sup>2</sup> /	X <sup>2</sup> /	X	X		1, 3, 4a, 9a 4a, 4b, 7, 10
By Country	2	X	X <sup>3</sup> /			
By Method of Transport		X	X	X		4a, 4b
By Customs Region and District Classified by: <u>D</u> = Digit						2, 10
Schedule A	1 2	4-1-D 7-D	4-1-D	4-1-D		
SIC Import Product Code TSUSA				8-D		
Quantity					1-D totals 7-D	OBE End-Use 5, 6
Net	X		X	X		
Shipping Weight		X	X			
Value				X	X	1, 2, 3, 4a, 5, 6, 7a, 8a, 9a, 10
Customs Value	Customs	X	X			
F.a.S., C.i.F.	F.a.S., C.i.F.					1a, 4b, 7b, 8b&c, 9b
Annual		X	X	X		
Monthly					X	
Other						Difference between SIC based output & import product codes - 1972
						Customs Region 6, 10 Customs Region & District 9
						IMPORTS

NOTE: In the FT 990 Column, numbers indicate the table in which that data type can be found.

## FOOTNOTES

### EXPORTS

- 1/ "World Area" includes principal trading partners and major trading blocs (e.g., EEC, EFTA, LAFTA, CACM).
- 2/ Summaries not provided for world area data.
- 3/ Also gives detail by continent.
- 4/ Includes DOD and Military Assistance grant aid shipments.
- 5/ Total exports only.

### IMPORTS

- 1/ "World Area" includes principal trading partners and major trading blocs (e.g., EEC, EFTA, LAFTA, CACM).
- 2/ Summaries not provided for world area data.
- 3/ Also gives detail by continent.
- 4/ Asterisk indicates total imports only.

I. SUMMARIES OF DATA TYPES BY PUBLICATION

Data Type		Short Title/Source and Reporting Unit	Frequency of Issue	Classification/Detail
<u>Imports</u> (General) Net quantity and value	<u>Value</u> BY CUSTOMS VALUE F.A.S., AND C.I.F.	<u>Geographic</u> BY COUNTRY OF ORIGIN when monthly average imports exceed \$1000 Totals for all other countries	FT 135 Census Current Month and Cumulative	<u>Schedule A</u> 7-digit All imports summarized from 4 digits to grand total by Customs value f.a.s., and c.i.f.
<u>Imports</u> (General) Shipping weight and value	<u>Shipping Weight and Value</u> BY VESSEL, AIR, and "All methods of transportation" (value only)	<u>Geographic</u> BY WORLD AREA; BY COUNTRY	FT 150 Census Annual	<u>Schedule A</u> 4-digit All imports summarized from 4 digits to grand total by method of transportation
<u>Imports</u> (General) Shipping weight and value	<u>Shipping Weight and Value</u> BY VESSEL, AIR, etc.	<u>Geographic</u> BY WORLD AREA (4- digit only); BY COUNTRY (4-digit and summaries through country totals)	FT 155 Census Annual	<u>Schedule A</u> 4-digit All imports summarized from 4 digits to grand total by method of transportation. Imports also summarized by country of origin from 4 digit through grand total

	Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Imports</u> (For Consumption General); Net quantity and value	<u>Geographic</u> BY WORLD AREA	<u>SPECIAL</u> Differences between SIC based import product code and SIC based output product code for current year ANNUAL	<u>SIC Based Import Product Code</u> FT 210 Census 8-digit	Import Statistics compiled by Census from Importers customs documents.
<u>Imports</u> (For Consumption General)	<u>Geographic</u> Imports for consumption BY COUNTRY OF ORIGIN	Other Quantity and value of general imports for commodities when difference from imports for consumption exceeds \$10,000 ANNUAL	TSUSA 7 digit FT 246	Import Statistics compiled by Census from Importers customs documents.

Data Type		Short Title/Source	Classification/Detail	Reporting Unit
<u>Exports</u>	<u>Net Quantity and Value</u>	<u>Geographic</u> BY COUNTRY OF ORIGIN when monthly average exports exceed \$1,000. Totals for all other countries	<u>Schedule B 7-digit</u> Value of all exports summarized from 4-digit through grand total	Export statistics compiled by Census from shippers' export declarations
<u>Exports</u> Domestic merchandise	<u>Shipping Weight and Value</u> BY VESSEL, AIR and "All methods of transportation" (value only)	<u>Geographic</u> BY WORLD AREA; BY COUNTRY	<u>Schedule B 4-digit</u> All exports summarized from 4 digits to grand total by method of transportation for both shipping weight and value	Export statistics compiled by Census from shippers' export declarations
<u>Exports</u> Domestic merchandise	<u>Shipping Weight and Value</u> BY VESSEL, AIR and "All methods of transportation" (value only)	<u>Geographic</u> BY WORLD AREA (4 digit only) BY COUNTRY (4 digit and summaries through country totals)	<u>Schedule B 4-digit</u> All exports summarized from 4 digits to grand total by method of transportation for both shipping weight and value	Exports summarized by country of origin from 4 digits through grand total
<u>Exports</u> Domestic merchandise	<u>Shipping Weight and Value</u> BY VESSEL, AIR and "All methods of transportation" (value only)	<u>Geographic</u> BY WORLD AREA (4 digit only) BY COUNTRY (4 digit and summaries through country totals)	<u>Schedule B 4-digit</u> All exports summarized from 4 digits to grand total by method of transportation for both shipping weight and value	Exports summarized by country of origin from 4 digits through grand total

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Exports</u> <u>Domestic Merchandise,</u> <u>Net Quantity and value</u>	<u>Geographic</u> <u>BY WORLD AREA</u>	<u>SPECIAL</u> <u>Differences between SIC based export product code and SIC based output product code for current year</u>	<u>SIC Based Export Product Code 8-digit</u> <u>FT 610 Census</u> <u>Export Statistics compiled by Census from shippers' export declarations</u>
<u>Trade</u> <u>Exports domestic and foreign</u> <u>Imports (for Consumption, General), Merchandise, Trade balance</u>	<u>ANNUAL</u>	<u>Schedule A 1-digit;</u> <u>Schedule B 1-digit</u> <u>(2 digit detail for machinery and transportation equipment)</u>	<u>FT 900 Census</u> <u>DOD Grant AID.</u> <u>No geographic breakdown</u> <u>Monthly/Current and Prior Year (Prior Year Annual Totals)</u> <u>Export Statistics compiled by Census from shippers' export declarations</u>

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<p>The FT 990 provides monthly and cumulative, and some quarterly and annual data for many combinations (usually pairs) of the following:</p> <ul style="list-style-type: none"> <li>--Imports for Consumption and General; Exports, foreign and domestic.</li> <li>--F.a.s./ c.i.f., customs values and some quantity data</li> <li>--World areas and countries, methods of transportation, customs districts.</li> </ul>	<p>FT 990 Census</p> <p>(See FT 990 Table of Contents for specific tables)</p>	<p><u>Selected Schedule A</u> <u>Schedule B and End Use</u></p>	<p>Importers Customs documents and shippers' export declarations</p>

Data Type	Short Title/Source	Classification/Detail	Other Data Sources
<u>Exports</u>	<u>Special</u>	U.S. Commodity Exports	For manufactures: 4-5
(Domestic merchandise)	Percent of exports to output/shipments.	and Imports as Related	digit SIC Product
<u>Imports</u>	Percent of exports to output/shipments.	Codes.	U.S. Dept. of Agriculture.
(For consumption)	Percent of exports to output/shipments.	Percent of new imports to new supply (output plus imports)	<u>Fisheries of the U.S.</u>
VALUE and some QUANTITY data	Output for mineral commodities and manufacturers shipments	+++	NOAA U.S. Dept. of Commerce
		+++	Industry code to which the commodities are primary.
		+++	<u>Minerals Yearbook</u>
			Bureau of Mines
			U.S. Dept. of Interior.

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Sales</u>	<u>New Orders</u>	<u>Unfilled Orders</u>	
----( M I L L I O N S ) ----			
1. Seasonally adjusted and unadjusted current and prior month; same period prior year.	Manufacturers' Export Sales ...	Durable Goods:	Establishment
	Census	4 major categories	
2. Month to month and long-term percent changes in total durable goods (excluding motor vehicles and parts).		3 subcategories to transportation equipment	
<u>Value of Export Shipments</u>	Number of Establishments Reporting Exports by State	Survey of the Origin of Exports...	SIC 2 digit except where specified in parentheses
	Census		Establishment
1. U.S. (4), Division, and State			
2. SMSM by selected industry group			

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<u>Exports</u> (including Military Grant-Aid shipments)	Imports (General)	Summary Time series 1923-1968 (Annual)	Importers' Customs documents and shippers' export declarations
Quarterly and Annual	Other	U.S. Exports and Imports Classified by OBE End- use Commodity Categories	End-Use 4-digit and summaries through 2-1 digit level
Quarterly and Annual		Bureau of Economic Analysis/Commerce	

A. Introduction

The government price data are collected and compiled principally by the Bureau of Labor Statistics. Price data is represented in the wholesale and consumer price indexes (WPI, CPI) the industry sector price indexes (ISPI) derived from the wholesale price index, the weekly spot market price index, and the import and export price indexes.

The CPI is a monthly series based on probability samples conducted either monthly or quarterly. The WPI and ISPI are monthly series based primarily on judgement samples. Monthly quotations are provided even though some series are only reported quarterly. Actual price quotations are published only for certain series of the WPI, and the individual commodities in the Spot Market Price series.

The Census Bureau publishes some unit value indexes on an SIC basis value of shipments per unit shipped and value added per unit shipped. These indexes appear after the publication of the Census of Manufactures from which they are drawn. The indexes are given only for Census years.

The Census Bureau also publishes export and import unit value indexes on a quarterly basis for selected end-use classifications.

Finally, the Bureau of Labor Statistics has begun publication of price indexes based on exporters' and importers' transactions prices. These have been released quarterly beginning with 1974 and are expressed within the framework of the SITC. At present these data cover only a certain industrial sector or selected aggregates, although plans exist for their expansion over the entire manufacturing sector.

Methodologies on sample techniques and the construction of the indexes appear in the BLS Handbook of Methods and Handbook of Labor Statistics, and as appendices to the Census publications that contain the unit value indexes.

B. Prices and Price Indexes

1. Wholesale Price Index

The Wholesale Price Index (WPI) measures average changes in prices of commodities produced or imported for sale in commercial transactions in primary markets in the U.S.

The WPI is based on a sample of about 9,000 respondents who provide price quotations on about 2,700 commodities. Whenever possible, price quotations are obtained from at least 3 companies. The number of quotations for any specific commodity is determined to some extent by the variation of price movements among them and the degree of price leadership. Respondents are visited initially by a staff member of the BLS; subsequent price quotations are solicited through the use of mail shuttle forms. Cooperation is voluntary.

The monthly index is based on a judgment sample of commodities, a sample of specifications (product descriptions) and a sample of respondents. Samples of specifications and of respondents are selected from consultation with trade associations or other industry representatives and with staff of other government agencies. Individual commodity specifications are selected also on the basis of net dollar sales.

The WPI is calculated as a weighted average of price relatives for each item. Each value weight includes not only the value of items priced but also the value of unpriced items whose price movements are assumed to behave similarly. When new weights are introduced, the index with new weights is linked to the index constructed with the earlier weights. The same procedure is used for the introduction and deletion of commodities from the series.

Each commodity price series is considered representative of a class of prices and is assigned its own weight, (the shipment value of the commodity) plus the weights of other related commodities not directly priced but whose prices are known or assumed to move similarly.

Whenever price data are not available for a particular month, missing prices are estimated for the calculation of the index. For commodities in the farm products and

processed foods groups, out of market seasonally, the price in off-season is estimated from the combined movement of the related commodities for which prices are available. For other commodities delinquent prices are usually held unchanged from the preceding month.

A detailed discussion of the methodology, including the index formulas used in constructing the index is provided in the BLS Handbook of Methods, Bulletin 1711, U.S. Department of Labor, available from the Superintendent of Documents.

## 2. Industry Sector Price Indexes (ISPI)

An industry sector price index is a composite index made up of price series that match the economic activity of a defined industry or economic sector. The Bureau of Labor Statistics began the ISPI program in 1962 with data beginning in 1957. Monthly series were started in 1965. The first indexes to be developed were output price indexes utilizing gross shipments weights. Input price indexes, i.e. indexes representing the price of industrial purchases will be added as the program expands.

The Bureau calculates two types of output indexes: 4-digit SIC industry price indexes and 5-digit Census product class price indexes. The 4-digit SIC industry index is an index of the primary and secondary products produced in the industry weighted by value of shipments originating within the industry. The product class index is weighted by total value of shipments for the product regardless of industry of origin. The four digit output index is built up from the 5 digit product indexes weighted by value of shipments originating in the industry.

Currently the scope of ISPI pricing is effectively restricted to the commodities covered in the WPI. The wholesale price quotations are assigned to a 7 digit product code defined by the Census Bureau. The 7 digit product indexes are then aggregated to 5 and 4 digit product class and industry indexes. Since January 1967, weights for the output indexes are 1963 value of shipments data obtained from the Census of Manufactures, (for the manufacturing sector). Values of imported commodities are not included.

For use in deflating industry shipments, the 4-digit SIC industry indexes are derived from 5-digit Census product class indexes weighted together by their shipments value for the particular industry. The indexes are constructed with a modification of the Laspeyres fixed-weight formula. Indexes are currently constructed for 155 manufacturing industries and 452 product classes.

A more comprehensive discussion of the methodology and procedures for the planned expansion of the ISPI program can be found in chapter 12 of the BLS Handbook of Methods.

### 3. Spot Market Prices

The Spot Market Price Index is a measure of price movements of 22 sensitive basic commodities whose markets are presumed to be among the first to be influenced by changes in economic conditions. The criteria for the selection of commodities were: (1) wide use for further processing, (2) freely traded in an open market, (3) sensitive to changing conditions significant in those markets, and (4) sufficiently homogeneous so that uniform and representative price quotations can be obtained over a period of time.

The prices used in the index are obtained from trade publications or from other government agencies. For many of the 22 items the commodity exchange prices are based upon transactions which cover relatively small proportions of the total sold in all markets. The price most commonly used is the spot price, the price at which a commodity is selling for immediate delivery. In the absence of a spot price, a bid or an asked price may be used.

The Spot Market Index is an unweighted geometric mean of the individual commodity price relatives, i.e. of the ratios of the current prices to the base period prices.

The 22 commodities are combined into an "All Commodities" grouping, with two major subdivisions: Raw Industrials, and Foodstuffs. Raw Industrials include burlap, copper scrap, cotton, hides, lead scrap, print cloth, rosin, rubber, steel scrap, tallow, tin, wool tops, and zinc. Foodstuffs include butter, cocoa beans, corn, cotton-seed oil, hogs, lard, steers, sugar, and wheat.

Further information on the spot market price index, including commodity specifications, and the formula used in calculating the index can be found in the BLS Handbook of Methods.

#### 4. Consumer Price Index

The consumer price index is a statistical measure of the average change in prices of goods and services bought, for day-to-day living by urban wage earners and clerical workers including families and single persons. The CPI is a weighted index number with "fixed" annual weights that represent annual consumption patterns in a base period. The quantities of goods represented in the index reflect not only goods and services actually priced, but also consumption of related items for which prices are not obtained. The CPI is constructed from prices actually charged to consumers, including sales and excise taxes. It also includes real estate taxes on owned homes which are part of the price of home ownership. Since 1953, it has treated the purchase of a home in the same way as the purchase of other major durable goods.

The Bureau of Labor Statistics began publication of indexes in 1919. Currently the CPI provides indexes for all items and major groups and subgroups for U.S. and urban portions of 39 major statistical areas and 17 smaller cities. The price index is based on a constant market basket of about 400 items, selected in the Survey of Consumer Expenditures for 1960-61. Price quotations are collected from a sample of about 18,000 establishments--grocery and department stores, hospitals, filling stations, and other types of stores and service establishments.

Annually over 1 million food price quotations are collected, also 72,000 rent charges and 455,000 other quotations are obtained for all other categories. About 4 price quotations are obtained for each non-food product per outlet sample.

Prices of foods, fuels, and a few other items are obtained every month in all 56 locations. Prices of most other commodities and services are collected every month in the five largest areas and every 3 months in other areas. Prices of most goods and

services are obtained by personal visits by BLS personnel. Some price quotes, however, are obtained by mail, telephone, or from other government agencies.

In calculating the index, price changes for the various items in each location are averaged together with weights which represent their importance in the spending of all wage earners and clerical workers. Local data are then combined to obtain a U.S. city average. Separate indexes are also published for areas grouped by size of city, by geographic region, and for 23 individual areas.

Revisions in samples (e.g. change in respondent, product substitutions and instances where there is variation in product specification) are introduced into the index through linking procedures. Variations in product specifications are adjusted so only price change is reflected despite quality changes that may have taken place.

The price index is based on three key samples: a sample of cities or areas where price quotations are collected, a sample of which items will be priced (from the various expenditure classes), and a sampling of outlets. Housing and rent quotations are drawn from a sample of consumer units.

Seasonally adjusted national indexes and percent changes are published for selected groups, subgroups, and items where there exists a significant seasonal pattern of price change.

Further information on sample methodology and index compilation formulas can be found in the BLS Handbook of Methods and the Handbook of Labor Statistics. The Handbook of Methods also provides a list of each product in the market basket of goods that comprises the total CPI. These products are also listed in an annual publication of BLS, "The Relative Importance of Components in the Consumer Price Index", which lists the individual item as a percent of all items in the index.

(Note: Change in the Consumer Price Index)

A program has been underway for the past 5 years at the Bureau of Labor Statistics to make major revisions to

One important change is the BLS plan 1/ to conduct the Consumer Expenditure Survey (CES) on a quarterly basis. The latest CES was a joint effort of both Census and BLS conducted in 1972-1973.

Some goals of the CPI revisions are to make its components more detailed, to widen the SMSA sampling base, to improve sample stratification, lower the non-response rate and to improve estimating procedures. BLS is also working to develop an improved approach to the problem of price adjustment for quality change.

The first major innovation is to construct two indices -- a new index for all urban households, 2/ and an expanded index for urban wage earners and clerical workers. The first will reflect more generally, the impact of inflation on urban dwellers. The second is planned to provide an improved basis for revisions in wage and salary agreements. These two indexes will be instituted in April of 1977, and be given close evaluation through 1980, when a decision will be made on whether to retain two indices on a permanent basis.

A detailed technical explanation of the revised CPI should be issued around the time of its implementation. In the interim, specific queries regarding the CPI revisions can be addressed to BLS or the local Department of Labor Field Office.

##### 5. Export and Import Price Indexes

The Bureau of Labor Statistics' export and import price index program as of June, 1976, covered 45 categories of manufactured and semi-manufactured products for exports, and 25 categories of manufactured and semi-manufactured products for imports. The export indexes

1/ Pending Congressional approval.

2/ This index should attain a coverage of 80% of the non-institutional population.

cover roughly 34 percent of U.S. exports and the import indexes, 14.0 percent of U.S. imports. The Bureau hopes to expand coverage eventually to all items in U.S. foreign trade.

The export and import price indexes are constructed from a sample of exporters and importers' transactions prices. The quotations are then weighted according to the importance of the commodity in U.S. trade. The index is published on an SITC basis.

6. Export and Import Unit Value Indexes (Census)

The historical Census unit value indexes for U.S. exports and imports are presented in five broad categories called economic classes. The quarterly data are provided by 4 digit end-use classification, summarized at the 2 digit level. The unit value indexes are constructed according to the Fisher formula. Weights from the preceding year and the current period are used and the indexes chained into a continuous series. A description of the formulas used in the compilation of the quantity and value, as well as the unit value indexes are located in the appendix of the Census publication: "Indexes of U.S. Exports and Imports by Economic Class: 1919 to 1971."

C. Principal Data Types

1. Wholesale Price Index

Principal Data Type: Monthly price indexes and prices quotations for certain commodities. Percent change from selected prior periods. Annual supplement also contains percent share of each commodity in the index (using 1963 weights). Monthly with Annual Supplement.

2. Industry Sector Price Index

Principal Data Type: Monthly price indexes and percent change from selected prior periods for selected SIC industries and product classes. Annual supplement also contains percent share of product class within the industry (1963 weights), and an annual time series from 1959 by product class. Appears in the WPI publications.

3. Tuesday Spot Market Price Indexes and Prices

Principal Data Type: Price index for all commodities (22 commodities), and the following groupings and

subgroups: foodstuffs, livestock and products, fats and oils, raw industrials, metals, textiles and fibers. Price per unit for the remainder of the commodities. Data for current and prior week, and same week prior year; also percent change from prior week, an prior year. Weekly.

4. Consumer Price Index

Principal Data Type: Monthly indexes and percent change from prior periods for commodity and service groups, expenditure groups and selected items, selected urban areas by commodity groups. Retail prices and indexes of individual food items, and fuels and electricity. Monthly. Quarterly and annual indexes also compiled.

5. Export and Import Unit Value Indexes (Census)

Principal Data Type: Quarterly and annual unit value indexes by 4 digit end-use classification. Historical data by economic class. Relative importance of each classification as a percent of total also given. Total value and quantity indexes also given. Quarterly. Historical data in separate publication.

6. Export and Import Price Indexes (BLS)

Principal Data Type: Export indexes for 45 product groups in machinery and equipment which account for over one-third of U.S. commodity exports by value. Import indexes for 25 categories of manufactured and semimanufactured products accounting for about 14 percent of U.S. imports. The quarterly press release contains index numbers for the current period and for 18 months preceding it.

D. SOURCE SUMMARIES

Agency/Source	Wholesale Prices and Price Indexes	Tuesday Spot Market Price Indexes and Prices
Frequency of Issue	Labor/BLS	Labor/BLS
Publication Started	Monthly with Annual Supplement	Weekly
Publication from End of Data Period	1902	1940
Time Period Covered	1 week to summary release. 1 month to detailed report.  Index for 3 months. Price quotations--where they occur--for one month only.	3 days  Current & prior week. Same period prior year. Percent change from prior week and year.

PUBLICATIONS CAN BE OBTAINED FROM:

- Local Government  
Printing Office Bookstore
- Local Bureau of Labor Statistics  
Field Office
- Superintendent of Documents  
Government Printing Office  
Washington, D. C. 20402
- Publications  
Bureau of Labor Statistics  
U.S. Department of Labor  
Washington, D. C. 20212

PRICES

SOURCE SUMMARIES

	Consumer Price Index Press Release/Detailed Report	Export and Import Price Indexes Press Release
Agency/Source	Labor/BLS	
Frequency of Issue	Monthly	Quarterly
Publication Started	1919	1971
Publication from End of Data Period	3 weeks, press release 2 months, detailed report	5 weeks - press release
Time Period Covered	Current month prior month also given for same data.	Current quarter and 5 prior quarters.
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>		
Publications Bureau of Labor Statistics U.S. Department of Labor Washington, D.C. 20212		
		PRICES

SOURCE SUMMARIES

	Indexes of Production Census of Manufactures Special Report	Indexes of U.S. Exports and Imports by Economic Class
Agency/Source	Commerce/Census	Commerce/Census
Frequency of Issue	Quinquennial	Quarterly/Occasional (Historical)
Publication Started	1939	Quarterly since 1958
Publication from End of Data Period	7 years	1 month/quarterly data
Time Period Covered	Census year only. (Deflators given for both current & prior Census year).	Annual Time series 1919-1971 Quarterly time series 1958- 1971
<u>PUBLICATIONS CAN BE OBTAINED FROM:</u>		
		Superintendent of Documents Government Printing Office Washington, D.C. 20402
		Local Government Printing Office Bookstore
		Local Commerce Department Field Office
		PRICES

## E. SUMMARIES OF DATA TYPES BY PUBLICATION

Data Type	Short Title/Source and Reporting Unit	Classification/Detail
<u>Annual Supplement</u>		
WPI aggregated to 2 digit. Monthly and annual average.	% share commodities in WPI 1963 weights.	Wholesale Prices and Price Indexes
WPI - 8 digit with aggregations to 2 digit.		
<u>Monthly</u>		
WPI for latest 3 months, seasonally adjusted and unadjusted.	% WPI by stage of processing and other groupings.	Company
% change from prior month, 3 months ago, and same month prior year.	Changes in Specifications series additions and deletions.	Company
Price per unit given for certain commodities.		
<u>Annual Supplement</u>		
ISPI Selected industries and product classes. Monthly and annual average. Annual time series from 1959.	% share of product class within industry. 1963 weights.	Industry Sector Price Indexes (published as part of the WPI publication) BLS
SIC 4 digit* and the 5 digit Numerical List of Manufactured Products.		
<u>Monthly</u>		
ISPI Selected industries and product classes for latest 3 months, the latest month prior year and the annual average for the prior year.	% change in 4 digit Index from 1, 3, 6, and 12 months ago.	Company

\* Version of classification in use in 1963.

PRICES

Data Type	Short Title/Source and Reporting Unit	Classification/Detail
<u>Weekly Index</u> "All Commodities" and four summary groupings	<u>Weekly Price Per Unit</u> 22 Commodities BLS  Current and Prior Week, Prior Year Period, and Percent Change <u>Index/Percent Change for:</u> 1. Commodity and service groups 2. Expenditure classes 3. Urban areas grouped in 5 size classes 4. Urban areas grouped by region 5. Selected urban areas by commodity groups 6. Selected Food and other consumer items. 7. Gasoline per city (also price per city)	<u>Spot Market Price Index</u> Trade associations and government agencies <u>Consumer Price Index</u> BLS  CPI Classification - 400 commodities PRICES

NOTE

The data types for the WPI and the CPI refer to the detailed reports published 1-2 months after the reference period.

The initial press releases contain current and prior month indexes, and comparisons with the same period a year ago, for summary commodity groupings, and for the CPI, summary service groups and expenditure classes. The ISPI does not appear in the WPI press release.

The press releases also contain graphs of the price indexes for major groupings and their percent changes.

Data Type	Short Title/Source and Reporting Unit	Classification/Detail
<u>Price Indexes</u>		
<u>Exports</u>	<u>Imports</u>	Export and Import Price Indexes
45 product groups in manufactured and semi- manufactured products.	25 groups of manufac- tured and semi-mana- factured products.	BLS
Quarterly		Exporters/Importers
<u>Unit Value Indexes</u>		
Value of shipments per unit shipped	Value added per Unit of Output.	Indexes of Production      SIC 4 digit
Quinquennial		Census
<u>Quarterly and Annual Unit Value Indexes</u>	<u>Percent Change Prior Quarter/Year Ago</u>	Indexes of U.S. Exports and Imports by Economic Class      Historical - by eco- nomic class. Census      Quarterly-selected Establishment      4 digit end-use categories.
1. 4 digit end-use with 2 digit aggregations		
2. "Relative Importance" weights.		Establishment
NOTE: The historical series contains quarterly data back to 1958 by economic class.		PRICES

A. Introduction

The Federal Government issues two periodic publications on financial statistics on a manufacturing industry basis. These are the Quarterly Financial Report (for manufacturing, mining and trade corporations) of the Federal Trade Commission, and the IRS Statistics of Income, Corporation Income Tax Returns which is published annually with approximately a 3 year time lag.

In addition to these publications, the Federal Reserve Board issues weekly, monthly and quarterly press releases. The weekly and monthly releases are entitled "Commercial and Industrial Term Loans Outstanding by Industry", the quarterly release is "Sales, Revenue, Profits, and Dividends of Large Manufacturing Corporations".

The Federal Reserve Board, the Treasury Department, the Securities and Exchange Commission, Federal Deposit Insurance Corporation and the Export-Import Bank all have publications that cover various aspects of financial transactions covering major economic sectors. The 12 regional Federal Reserve Banks also publish selected financial statistics. These agencies and federal reserve banks can be contacted directly for lists or catalogs of their publications.

Import sources of financial data and descriptions of corporate activity are annual reports submitted to the Securities and Exchange Commission by about 12,000 corporations in compliance with Federal securities law and regulations. These corporate annual reports are the 10-K, the 12-K, and the Annual Report to Shareholders (ARS). The 10-K and 12-K reports, which are more detailed than the ARS, include such data items as: net sales or operating or other revenues; cost of goods sold or other operating expenses or gross profit; interest expense, income tax expense, net income or loss, etc. Further information on these reports can be obtained from the Section of Public Reference, Office of Records and Service, Securities and Exchange Commission, Washington, D.C. 20549.

The Bureau of the Census has an Enterprise Statistics Program that involves the regrouping of census data records of establishments under common ownership or

control in order to show various economic characteristics of the owning or controlling firms. Statistics for the enterprise-establishment relationships are tabulated by type of company organization, by company size, and by industry classification, as well as by cross tabulations which indicate company industrial diversification patterns. One special group of establishments, central administrative offices and auxiliaries, are examined in detail in a second volume. The 1967 Enterprise Statistics, Volume 3, provides a link of Census establishment to IRS corporation data. By aggregating both IRS and Census data of the explicitly and implicitly matched corporations, it is possible to relate on a directly comparable basis the published industry distributions of corporate financial data available in the IRS Statistics of Income: 1967 publications with the establishment data collected in the 1967 economic censuses.

B. Quarterly Financial Report (QFR)

The purpose of the QFR sample survey (conducted and published by the Federal Trade Commission) is to produce statements of income and retained earnings, balance sheets, rates of return, and related financial and operating statistics for all manufacturing corporations, classified by industry and asset size.

The QFR utilizes an "optimal allocation sampling method". A two part sample is drawn from the IRS sample of U.S. Corporation Income Tax Returns, (Form 1120) and applications filed for Federal Social Security Employer's identification numbers. Sub-samples are drawn so that portions of the sample are replaced quarterly. Screening techniques assure that the sections of the sample are mutually exclusive.

The sample from the income tax returns is drawn in two stages. Stratification by size is employed in the IRS sample. In the FTC sample, stratification by both industry and total assets is used. In the sampling of applications for a Federal Social Security Employer's Identification Number, the criteria for stratification are number of employees and quarter in which application is made.

Each reporting corporation is classified and tabulated according to its total assets reported for that quarter.

Prior to 1973, however, each corporation was classified according to its total assets reported for that quarter for which it first submitted a report, and, unless deleted from the sample in the interim it remained in the same asset size category until the first quarter of the following calendar year.

The sample consists of:

1. About 2.5 percent of all corporations (manufactures) with total assets of less than \$1 million.
2. About 25 percent of all corporations with total assets of \$1-5 million.
3. About 75 percent of all corporations with assets of \$5-10 million.
4. All manufacturing corporations with total assets over \$10 million.

Each report form received is reviewed by accountants and, where variations from conventional accounting are encountered, adjustments are made after communicating with company officials.

Substantial changes in reporting procedures were made in first quarter 1974 that resulted in non-comparable data. Although earlier series are not being adjusted, one quarter of data is reported on both bases for comparison.

During the first quarter of 1975 a considerable number of companies were reclassified by industry. To provide comparability the four quarters of 1974 were restated in that issue to reflect these reclassifications.

Further definitions, a summary of survey instructions, and comments on specific differences between the QFR and other statistics are provided in the introduction to the published issue.

C. IRS Corporation Statistics

The publication Corporation Income Tax Returns and the unpublished "Source Book" are sources of financial data on U.S. manufacturing industries. Included are data on

over 100 manufacturing industries for about 90 balance sheet, income statements, tax, and investment credit items..

The data in the report are estimates based on stratified probability samples of corporation income tax returns selected before audit. The 1970 income year was defined to cover accounting periods from July 1970 through June 1971. Over 1,665,000 active corporations filed returns for this period including approximately 257,000 returns filed by Small Business Corporations electing to be taxed through their shareholders.

Specifically excluded from the estimates are financial data from returns of inactive corporations, foreign corporations where such data were for income not effectively connected with a trade or business within the U.S., farmers' cooperatives exempt from income tax under code section 521, and non-profit organizations.

Sample rates ranged from 2 percent to 100 percent depending on the type of return, size of total assets, and size of net income (or deficit).

Returns are classified according to either the size of total assets or the size of net income, whichever places them in the sample class having the higher class number. Nearly all returns were selected for the samples on the basis of a systematic sample design of randomly designated digits of Employer Identification Numbers.

Although the returns were not audited prior to statistical sampling, corrections were made to the taxpayers' figures through mathematical verification, followed by statistical review procedures for reasonableness and accuracy.

Historical statistics by industry in greater detail than those shown throughout the published Statistics of Income reports are presented in the Corporation Source Book of Statistics of Income. They are available as unpublished worksheets and contain, for 1970, selected balance sheet and income statement items cross-classified by total asset size classes, by 3 digit ESIC industry. Information about the specific content of and ordering procedures for the Source Book for any year may be obtained by writing the Director, Statistics Division, Internal Revenue Service, Washington, D.C. 20224.

Changes in comparability over the past 10 years have resulted changes in law, in the format and types of tax returns, and in statistical treatment. When making detailed comparisons of historical statistics, the text of the annual Statistics of Income reports should be referred to for descriptions of changes in law that are pertinent to the statistics. In general, however, the statistics shown in the historical tables are comparable from year to year.

Further detail on methodology, copies of reporting forms and an extensive section on definitions used are included in the IRS "Statistics of Income - Corporation Income Tax Returns".

D. Other FRB Releases

The FRB has a quarterly press release entitled "Sales, Revenues, Profits and Dividends of Large Manufacturing Corporations", which provides quarterly and annual data for the specified data types for durable and non-durable goods, and for 5 major industry divisions (including motor vehicles). The number of corporations included in the series is specified in parentheses. The number of corporations included in the total series is 170.

A second FRB release shows the commercial, "term" commercial and industrial loans of large commercial banks. Data are shown by major industry group for loans outstanding at the end of the month, and net change by quarter (figures in millions).

All the major financial and business statistics series published by the FRB are included in the monthly, Federal Reserve Bulletin. Subscriptions may be obtained from:

Division of Administrative Services  
Board of Governors of the Federal Reserve System  
Washington, D.C. 20551

E. Principal Data Types

1. Quarterly Financial Report

Principal Data Type: The following types of data are given for 2 and selected 3 digit enterprise classifications and for all manufacturing by asset size: Profits per dollar of sales; annual rates of profit on stock holders' equity; and financial statements including: income statement in ratio format, operating ratios, assets, liabilities, and net working capital.

2. IRS Statistics of Income

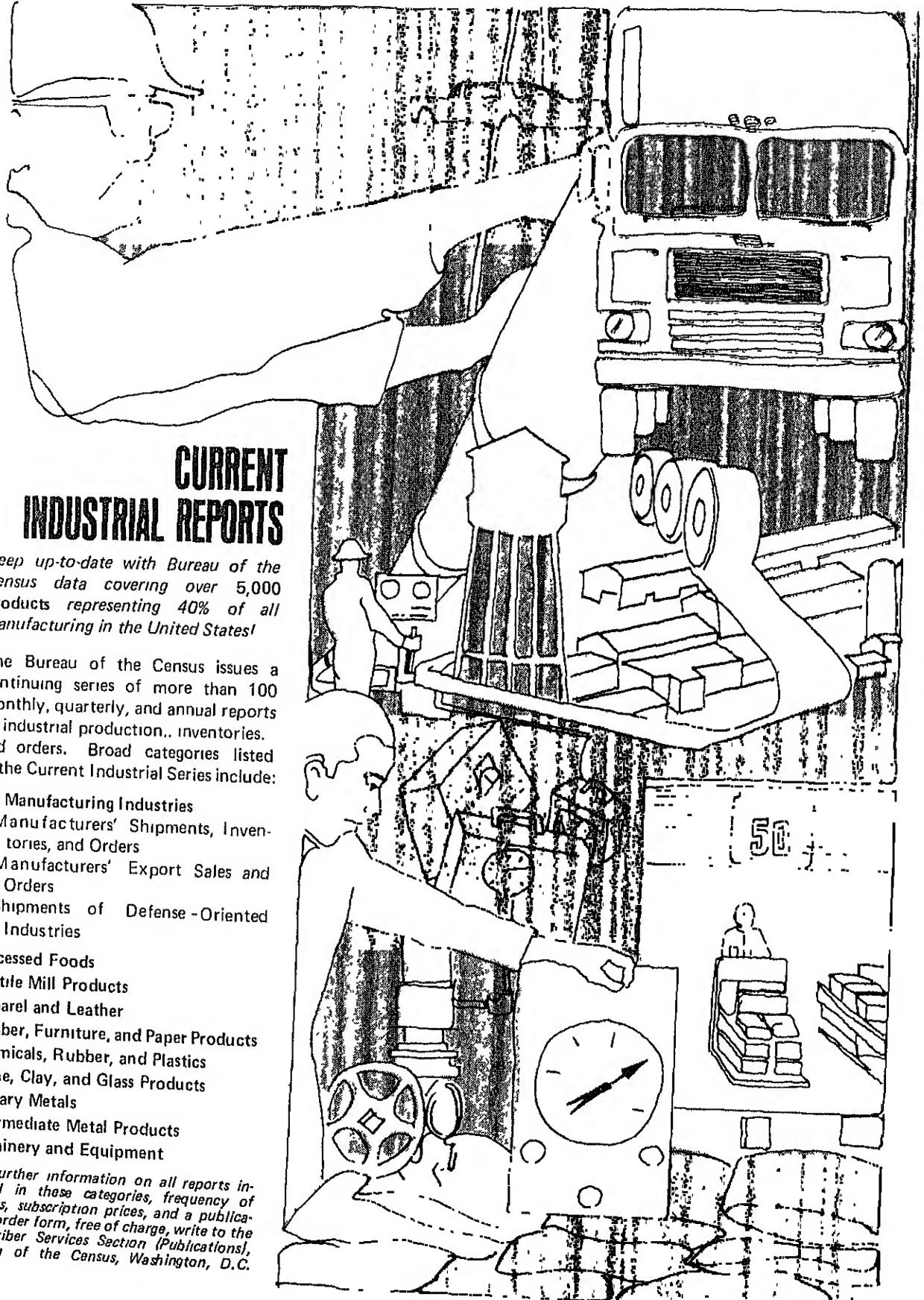
Principal Data Type: Assets and liabilities (by type) receipts, deductions, stockholders equity. Also: net income or deficit, taxable income, credits and payment items, and divident receipt items. Annual

F. DATA SOURCE SUMMARIES

<p>Quarterly Financial Report for Manufacturing Corporations</p>		<p>Statistics of Income - Corporation Income Tax Returns</p>	
Agency/Source	Federal Trade Commission	Treasury/IRS	
Frequency of Issue	Quarterly	Annual	
Publication Started	1947	3 years	
Time Lag to Publication	2½ - 3 months	1 year. 10 year time series	
Time Period Covered	5 quarters	For summary data.	
<p><u>PUBLICATIONS CAN BE OBTAINED FROM:</u></p>			
<p>Superintendent Of Documents Government Printing Office Washington, D. C. 20402</p>		<p>Unpublished Source Book: Direct inquiries to: Director, Statistics Division Internal Revenue Service Washington, D. C. 20224</p>	
<p>FINANCE</p>			

G. SUMMARIES OF DATA TYPES BY PUBLICATION

Data Type	Short Title/Source	Classification/Detail	Reporting Unit
<p>Manufacturing total for classification and by asset size:</p> <ol style="list-style-type: none"> <li>1. Profits per dollar of sales</li> <li>2. Annual rates of profit on stockholder's equity</li> <li>3. Financial statement:           <ol style="list-style-type: none"> <li>a. income statement in ratio format</li> <li>b. operating ratios</li> <li>c. assets (items &amp; total assets)</li> <li>d. liabilities and stockholders equity (% total assets)</li> <li>e. net working capital</li> </ol> </li> </ol>	<p>Quarterly Financial Report ESIC</p>	<p>ESIC 2-3 digit and selected</p>	<p>Corporation</p>
<p>Tax, Tax Preference Investment Credit, Balance Sheet and Income Statements</p>	<p>Statistics of Income IRS</p>	<p>ESIC 2-3 digit and selected</p>	<p>Corporation</p>



## CURRENT INDUSTRIAL REPORTS

Keep up-to-date with Bureau of the Census data covering over 5,000 products representing 40% of all manufacturing in the United States!

The Bureau of the Census issues a continuing series of more than 100 monthly, quarterly, and annual reports on industrial production, inventories, and orders. Broad categories listed in the Current Industrial Series include:

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Manufacturers' Export Sales and Orders

Shipments of Defense-Oriented Industries

Processed Foods

Textile Mill Products

Apparel and Leather

Lumber, Furniture, and Paper Products

Chemicals, Rubber, and Plastics

Stone, Clay, and Glass Products

Primary Metals

Intermediate Metal Products

Machinery and Equipment

For further information on all reports included in these categories, frequency of reports, subscription prices, and a publications order form, free of charge, write to the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS  
U.S. GOVERNMENT PRINTING OFFICE: 1977-261-2 38/356

